

**The Theory of Indian Painting:  
the *Citrasutras*, their Uses and Interpretations**

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## Abstract

This study critically analyses the main concepts described in the Sanskrit texts on painting, the *citrasutras*. The *citrasutras* are a section of Sanskrit scientific literature analysing painting within the framework of Indian philosophical thought.

This thesis explores the content of the *citrasutras*, critically examines the different ways in which they have been interpreted and used in the study of Indian painting, and suggests a new approach to reading and understanding them. One of the aims of this thesis is to draw together, examine and compare the concepts of the *citrasutras* such as measurement and proportion, and will also add, for the first time, the concepts of *talamana* and iconography to the theory of painting. This is to overcome the limits of current research, which considers concepts of the *citrasutras* separate from those of the texts on the theory of sculpture. It is argued here that this widespread approach is unhelpful if not misleading for our understanding of the theory of Indian painting.

Another point raised by this work is that the texts have always been regarded as prescriptive compilations. This established view directly contradicts the central observation made in this study that the *citrasutras* present different views on Indian painting. This is evidenced by the many contradictions that appear in the study of the *citrasutras*, and in particular the discrepancies between textual images and extant painting.

A key empirical basis from which the critical analysis and commentary of this study draw is the application of views and experiences of traditional painters living and practising their art today. Their accounts are drawn upon to furnish the argument of this study that the *citrasutras* are not to be considered as prescriptive guides for painters. Rather, the texts constitute a theoretical basis that should work in the mind of a painter and can therefore be translated into practice in various ways.

It is hoped that the comparison and analysis of textual concepts will provide new insights into our understanding of the practice of painting and our interpretation of the *citrasutras*, and that an appropriate reading of the texts will bring us closer to appreciating Indian painting from an *Indian* perspective.

## Contents

Acknowledgements	4
Notes on transcription	5
Abbreviations and editions of major texts	6
List of Tables	8
List of Figures	9
 Introduction	 15
 Chapter 1      The Texts, their Translations and Interpretation	 20
 Chapter 2      The Traditional Indian Concept of Painting	 35
 Chapter 3      Systems of Measurement and Proportion	 62
 Chapter 4 <i>Talamana</i> and <i>Lambamana</i> Systems	 95
 Chapter 5      Stances, Hand and Leg Postures	 120
 Chapter 6      Iconography	 145
 Chapter 7      Colours, Plaster and Brushes	 160
 Chapter 8      The <i>Rasa</i> Theory	 189
 Conclusions	 206
 Appendix I	 214
Appendix II	215
Appendix III	217
Glossary	219
Bibliography	228
Illustrations	238



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## Note on pronunciation and transcription

Diacritical marks are not used in the main text. Exception is made for the Abbreviations and Glossary sections. In these two cases the diacriticals are the standard used in literature.

### In the text

Sanskrit 'ṣ' and 'ś' are both transcribed with 'sh', like in lakshana.

'R' is preferred to 'ri' for transcribing the Sanskrit vocalic 'ṛ' as in brhat. 'Ri' is used only in the case of very common words like Krishna.

'C' is preferred to the English 'ch' for Sanskrit words in which 'c' is not aspirated as citra (read chitra).

'Ch' is used for the aspirated 'c' as in Aparajitaprccha.

The English plural 's' is added where appropriate, for example in citrasutras.

### In the Abbreviations and Glossary

The Glossary section contains Sanskrit and Hindi (H) words which are transcribed as appropriate.

Vowel length is transcribed as follows: ā, ī and ū.

Retroflex consonants are transcribed as follows: ṭ, ṭh, ḍ and ḍh.

Sibilants are transcribed as ś and ṣ.

Vocalic r and Hindi retroflex r are both transcribed as ṛ.

Nasals and anusvāra are transcribed as follows: ṇ, ñ, ṇ̐, ṇ̐̐.

Visarga is transcribed as ḥ.

## Abbreviations and editions of major texts

AbhCint	Abhilashitarthacintamani (Abhilaṣitārthacintāmaṇi): Sastry, Shama (ed.), <i>Abhilashitarthacintamani of Somesvara Deva</i> , Part I, Mysore, 1926
ApaPr	Aparajitapṛccha (Aparājitapṛcchā): Dubey, Lal Mani, <i>Aparajitapṛccha. A Critical Study</i> , Laksmi Publications, Allahabad, 1987; Appendix in Shukla, D.N., <i>Hindu Canons of Painting or Citra-Laksanam</i> , Lucknow, 1957
BrSam	Brhat Samhita (Br̥hat Saṃhitā): Bhat, Ramakrishna (ed.), <i>Varahamihira's Brhat Samhita</i> , part I & II, Motilal Banarsidass, Delhi, 1981
CKS	Citrakarmashastra (Citrakarmaśāstra): Marasinghe, E.W., <i>The Citrakarmashastra Ascribed to Manjusri</i> , Sri Satguru Publications, Delhi, 1991
DMP	Devata-murti-prakaranam (Devatāmūrtiprakaraṇa): Vinaysagar, Sahityavachaspati (ed.), <i>Mandan Sutrādhar's Devata-Murti-Prakaranam [with Hindi-English Translations]</i> , Prakrit Bharati Academy, Jaipur, 1999
Man	Manasollasa (Mānasollāsa): Shrigondekar, G.K. (ed.) <i>Manasollasa of King Somesvara</i> , vol. II, Oriental Institute, Baroda, 1939
Mayamata	(Mayamata): Dagens, Bruno (ed.), <i>Mayamatam. Treatise of Housing, Architecture and Iconography</i> , 2 vols., IGNCA and Motilal Banarsidass, Delhi, 1994
NagCitLak	Citalakshana of Nagnajit (Citalakṣaṇa of Nagnajit): Goswamy, B.N. and Dahmen-Dallapiccola, A.L., <i>An Early Document of Indian Art</i> , Manohar, New Delhi, 1976

Natya Shastra	(Nāṭya Śāstra): <i>The Natya Sastra of Bharatamuni</i> , English tr., Sri Satguru Publications, Delhi, 2000 (1 <sup>st</sup> ed. 1986)
Pratima-mana-lakshana	(Pratimāmānalakṣaṇa): Appendix B in Banerjea, J. N., <i>The Development of Hindu Iconography</i> , Calcutta, 1941; Bose, P.N., <i>Pratima-mana-lakshana</i> , Moti Lal Banarsi Dass, Lahore, 1929
SamSut	Samarangana Sutradhara (Samarāṅgaṇa Sūtradhāra): Sastri, G. (ed.), <i>Samaranganasutradhara of King Bhojadeva</i> , Gaekwad's Oriental Series no. XXV, Baroda, 1925, vol. II
Shukraniti	(Śukranīti): Sarkar, B. K., <i>The Sukraniti</i> , Oriental Reprint, New Delhi, 1975 (1 <sup>st</sup> ed. 1914)
SR	Shilparatna (Śilparatna): Bhattacharya, Asok K., <i>Citralaksana. A Treatise on Indian Painting</i> , Sarasvat Library, Calcutta, 1974; Sastri, G. (ed.), <i>The Silparatna by Sri Kumara</i> , Part I, Trivandrum Sanskrit Series no. LXXV, 1922
Vastusutra Upanishad	(Vāstusūtra Upaniṣad): Boner, Alice et al., <i>Vastusutra Upaniṣad. The Essence of Form in Sacred Art</i> , Motilal Banarsidass, Delhi, 1982
ViDha	Vishnudharmottara (Viṣṇudharmottara): for the Citrasutra section Dave Mukherji, Parul, <i>The Citrasutra of the Visnudharmottara Purana</i> , IGNCA and Motilal Banarsidass, Delhi, 2001; for the Pratimalakshana section Bhattacharyya, D.C., <i>Pratimalaksana of the Visnudharmottara</i> , Harman Publishing House, New Delhi, 1991

## List of tables

Table I	Classification of painting	52
Table II	Height of <i>panca-purushas</i>	68
Table III	<i>Talamana</i> of the <i>Devata-murti-prakarana</i>	101
Table VI	<i>Talamana</i> of the <i>Pratima-mana-lakshana</i>	103
Table V	<i>Talamana</i> of the <i>Shukraniti</i>	105
Table VI	Measurement of hands and feet of the <i>Shukraniti</i>	106
Table VII	<i>Talamana</i> of the <i>Citrakarmashastra</i>	107
Table VIII	Comparing <i>sapta tala</i> measurements	108
Table IX	Comparing <i>ashta tala</i> measurements	109
Table X	Comparing <i>nava tala</i> measurements	109
Table XI	Comparing <i>dasha tala</i> measurements	110
Table XII	Stances	123
Table XIII	Characteristics of Brahma	149
Table XIV	Characteristics of Vishnu	151
Table XV	Characteristics of Ganesha	152
Table XVI	Characteristics of Lakshmi	154
Table XVII	Characteristics of Jina	156
Table XVIII	Primary colours	170
Table XIX	<i>Rasas</i>	197

## List of figures

- Figure 1 Print representing the image of Vishvakarma from a painter's studio in Nathdvara (Rajasthan)
- Figure 2 Image of Vishvakarma in a temple of Udaipur (Rajasthan)
- Figure 3 Representation of *satya* type (Sivaramamurti 1978, Fig. 58)
- Figure 4 Representation of *vainika* type (Sivaramamurti 1978, Fig. 59)
- Figure 5 Representation of *nagara* type (Sivaramamurti 1978, Fig. 60)
- Figure 6 Representation of *tala* and *mukha* of 12 *angulas* according to Banerjea (1941, plate VI)
- Figure 7 Representation of *tala* and *mukha* according to Ganapati Sthapati (2002, p. 282)
- Figure 8 Representation of the *hamsa* stereotype according to Dave Mukherji (2001, diagram III)
- Figure 9 Representation of the *hamsa* stereotype according to Chatterjee Sastri (1971)
- Figure 10 Representation of the *bhadra* type (Dave Mukherji 2001, diagram IV)
- Figure 11 Representation of the *malavya* type (Dave Mukherji 2001, diagram V)
- Figure 12 Representation of the *rucaka* type (Dave Mukherji 2001, diagram VI)
- Figure 13 Representation of the *shashaka* type (Dave Mukherji 2001, diagram VII)
- Figure 14 Representation of an image of 108 *angulas* in height corresponding to a *nava tala* measurement (Banerjea 1941, plate VI)
- Figure 15 Representation of four kinds of faces according to Ganapati Sthapathi (2002, p. 286).
- Figure 16 Forms of the face to be avoided for the depiction of gods according to the *Vishnudharmottara* (Sivaramamurti 1978, Fig. 64, p. 76)
- Figure 17 Representation of the eye shaped like a bow according to Sivaramamurti (1978, Fig. 46, p. 52)
- Figure 18 Representation of the eye shaped like a fish according to Dvivedi and Dube (1999, p. 24), Ganapati Sthapati (2002, p. 287) and Sivaramamurti (1978, Fig. 46, p. 52)
- Figure 19 Representation of the eye shaped like a petal of the blue lotus *utpala* (Dvivedi and Dube 1999, p. 24 and Sivaramamurti 1978, Fig. 46, p. 52)
- Figure 20 Representation of the eye shaped like a petal of the lotus *padma* according to Dvivedi and Dube (1999, p. 24), Ganapati Sthapati (2002, p. 287) and Sivaramamurti (1978, Fig. 46, p. 52)
- Figure 21 Representation of the eye shaped like a shell (*shankha*) (Sivaramamurti 1978, Fig. 46, p. 52)
- Figure 22 Representations of *shrivatsa* marks according to Sthapati (2002, p. 190)

- Figure 23 Medieval Kerala painting from Triprayar (Sivaramamurti 1994, Fig. 103, p. 127)
- Figure 24 Medieval Singhalese painting from Hindagala (Sri Lanka)
- Figure 25 Tibetan traditional painting (20<sup>th</sup> century) by the traditional artist Phuntsok Sangpo (Sangpo 1996, p. 147)
- Figure 26 The sculptor Ram Prasad Sharma explaining the measurement of Lakshmi
- Figure 27 *Young Woman with a Mirror* (1515) by Giovanni Bellini (De Vecchi and Cerchiari, *Arte nel Tempo*, vol. 2, Bompiani, 1991)
- Figure 28 Use of the compass (*parkar*) by a sculptor in the Jaina studio
- Figure 29 Jaina studio in the Murti Mohalla, Jaipur
- Figure 30 Illustration of the twelfth *tirthankara* Vasupujya
- Figure 31 Table of *talamana* measurements according to Rao (1920, pp. 36-37)
- Figure 32 Examples of *kirtimukha*. The top image represents a *kirtimukha* made by a sculptor in Bhubaneshvar (Orissa). The image above shows a *kirtimukha* detail from the Mukteshvara temple (10<sup>th</sup> century) in Bhubaneshvar.
- Figure 33 Representation of *uttama* and *madhyama-sapta-tala* according to Ganapati Sthapati (2002, p. 405)
- Figure 34 Representation of *madhyama-ashta-tala* according to Ganapati Sthapati (2002, p. 398).
- Figure 35 Representation of *uttama*, *madhyama* and *adhama-nava-tala* according to Ganapati Sthapati (2002, pp. 376, 384, 386)
- Figure 36 Representation of Brahma, Shiva and Vishnu according to the *uttama-dasha-tala* (Ganapati Sthapati 2002, pp. 308, 309)
- Figure 37 Representation of a *bhuta* according to the *catus-tala* (Ganapati Sthapati 2002, p. 441)
- Figure 38 Representation of Ganesha according to the *catus-tala* (Rao, 1920)
- Figure 39 Representation of Buddha in *uttama-dasha-tala*. Drawing by Marasinghe according to the *Citrakarmashastra* (1991, Fig. 14)
- Figure 40 Details of the measurement of the face according to the *uttama-dasha-tala* drawn by Marasinghe following the prescriptions of the *Citrakarmashastra* (1991, Fig. 24)
- Figure 41 Representation of *madhyama-dasha-tala* drawn by Marasinghe according to the *Citrakarmashastra* (1991, Fig. 16)
- Figure 42 Representation of *adhama-dasha-tala* drawn by Marasinghe according to the *Citrakarmashastra* (1991, Fig. 17)
- Figure 43 Representation of a *panca-tala* Ganesha according to Rao (1920, plate XI)
- Figure 44 Representation of a *kinnara* in *madhyama-tri-tala* measurement (Rao 1920, plate XIII)
- Figure 45 Representation of some horizontal lines according to Rao (1920, plate X)

Figure 46 Representation of vertical and horizontal lines according to Marasinghe (1991, Fig. 19) following the *Citrakarmashastra*

Figure 47 Representation of the different stages in the realisation of a painting as described in the *Shilparatna*. Drawing by Sivaramamurti (Sivaramamurti 1979, p. 171)

Figure 48 Two paintings representing the images of Shri Nath by Ramesh Chandr Jangid (Nathdvara)

Figure 49 The painter Ghanshyam Sharma (Nathdvara) explains with the use of a compass the division in *talas* of his painting representing the image of Shri Nath

Figure 50 Sketch showing the measurement of Shri Nath and his stele drawn by Chiranjeev Lal (Nathdvara) according to the proportions of the image standing in the *haveli* temple of Nathdvara

Figure 51 Fresco painting in the Mahuavala Akhara showing horizontal lines and a vertical line dividing into two parts the entire composition

Figure 52 Sketch of a Tanjore painting on board showing horizontal and vertical lines

Figure 53 Pricked drawing representing Krishna as a child used by Kalamani Venkatesaraja for his Tanjore painting on board

Figure 54 Representation of the stances of the *Vishnudharmottara* and *kshayavrdhhi* according to Dave Mukherji (2001, diagram I)

Figure 55 Representation of frontal stances described in the *Shilparatna* according to Bhattacharya (1974, p. 49)

Figure 56 Representation of *tarjani hasta mudra* (Ganapati Sthapati 2002, p. 87)

Figure 57 Representation of *suci hasta mudra* (Ganapati Sthapati 2002, p. 86)

Figure 58 Representation of *varada hasta mudra* (Sthapati 2002, p.84)

Figure 59 Representation of *abhaya hasta mudra* (Sthapati 2002, p. 86)

Figure 60 Representation of *dharmacakra mudra* (Marasinghe 1991, Fig. 30)

Figure 61 Representation of *bhumisparsha mudra* (Marasinghe 1991, Fig. 30)

Figure 62 Representation of *yoga mudra* according to Rao (1914, Fig.17)

Figure 63 Representation of *dhyana hasta* according to Sthapati (2002, p. 91)

Figure 64 Representation of *dhyana hasta* according to Marasinghe (1991, Fig. 30)

Figure 65 Representations of *vyakhyana hasta mudra* according to Sthapati (2002, p. 86)

Figure 66 Representation of *jnana mudra* according to Rao (1914, Fig. 16)

Figure 67 Representations of *anjali hasta mudra* according to Marasinghe (1991, Fig. 29) and Sthapati (2002, p. 91)

Figure 68 Representations of *kataka hasta mudra* according to Sthapati (2002, p. 85)

Figure 69 Representations of *simha karna hasta mudra* according to Sthapati (2002, p. 85)



- Figure 70 Representation of *vaishnava pada mudra* (Sthapati 2002, p. 64)
- Figure 71 Representation of *samapada pada mudra* (Sthapati 2002, p. 60)
- Figure 72 Representation of *vaishakha pada mudra* (Sthapati 2002, p. 64)
- Figure 73 Representation of *alidha pada mudra* (Sthapati 2002, p. 65)
- Figure 74 Representation of *pratyalidha* posture after the *Vishnudharmottara* by Sastri (1971)
- Figure 75 Representation of *sukhasana* according to Sthapati (2002, p. 61)
- Figure 76 Representation of *sukhasana* according to Boner (1982, p. 108)
- Figure 77 Representation of *yogasana* (Sthapati 2002, p. 63)
- Figure 78 Representation of *svastikasana* (Sthapati 2002, p. 63)
- Figure 79 Representation of *svastikasana* according to Boner (1982, p. 109)
- Figure 80 Representation of *svastikasana* as a standing pose (Sthapati 2002, p. 64)
- Figure 81 Representation of *kukkutasana* (Boner 1982, p. 109)
- Figure 82 Representation of *vishamasana* (Boner 1982, p. 108)
- Figure 83 Representation of *saumyasana* (Boner 1982, p. 109)
- Figure 84 Representation of *raja lingasana* (Sthapati 2002, p. 62)
- Figure 85 Representation of *virasana* (Sthapati 2002, p. 62)
- Figure 86 Fresco painting representing Devnarayan and his court (19<sup>th</sup> century) (Sanvar, Udaipur District)
- Figure 87 *Mahavira on Mount Meru* from a *Kalpasutra* Manuscript (Mandu, c. 1440) (Welch 1997, p. 71)
- Figure 88 Representation of Shri Nath ji celebrating *rathayatra* (mid 18<sup>th</sup> century) (Ambalal 1987, p. 36)
- Figure 89 *Brahma Riding a Goose* (Mankot, c. 1720) (Filippi 1997, p. 48)
- Figure 90 *Kamandalu* (Sthapati 2002, p. 187)
- Figure 91 *Aksha-sutra* (Boner 1982, p. 106)
- Figure 92 *Sruc* and *sruva* (Sthapati 2002, p. 191)
- Figure 93 Mural painting in Shriranganatha temple at Shrirangam (14<sup>th</sup>-17<sup>th</sup> century) representing Vishnu resting on Ananta-Shesha
- Figure 94 Bow (Sthapati 2002, p. 185)
- Figure 95 Discus (Sthapati 2002, p. 186)
- Figure 96 Conch (Sthapati 2002, p. 187)
- Figure 97 Mace (Sthapati 2002, p. 185)
- Figure 98 Sword (Sthapati 2002, p. 190)
- Figure 99 Mural painting representing the image of Ganesha in the Brhadishvara temple (11<sup>th</sup> century) in Tanjore (Tamil Nadu)

- Figure 100 *Ankusha* or elephant hook (Sthapati 2002, p. 184)
- Figure 101 *Parashu* or axe (Sthapati 2002, p.186)
- Figure 102 Ganesha as Heramba. Incompleted Orissan painting (Raghurajpur)
- Figure 103 *Pasha* or noose (Sthapati 2002, p. 184 and Boner 1982, p. 106)
- Figure 104 Lakshmi. Tanjore painting by the master craftsman T. Venkatesaraja (Tanjore, Tamil Nadu)
- Figure 105 Lakshmi. Orissan painting (Mohanti 1984, Fig. 15)
- Figure 106 Jain *tirthankara* (Sthapati 2002, p. 328)
- Figure 107 Ganesha holding axe and mace in the upper hands, and *abhaya* and *laddus* in the lower hands. Sculpture by Ram Prasad Sharma (Jaipur)
- Figure 108 Ganesha holding lotus and *ankusha* in the upper hands, and *abhaya* and *laddus* in the lower hands. Sculpture by Ram Prasad Sharma (Jaipur)
- Figure 109 Ganesha holding axe and *ankusha* in the upper hands, and *abhaya* and *laddus* in the lower hands. Sculpture by Ram Prasad Sharma (Jaipur)
- Figure 110 Ganesha as Pancamukhi with five heads and ten arms (Mohanti 1984, Fig. 29)
- Figure 111 Standing Ganesha holding a broken tusk and *laddus* in his upper arms, and *akshamala* and axe in his lower hands. Sculpture by Harihar Moharana (Bhubaneshvar)
- Figure 112 Line rendering according to the *Vishnudharmottara* (Sivaramamurti 1978, p. 5 and Bhattacharya 1976, Fig. 3)
- Figure 113 *Krishna Battles the Armies of the Demon Naraka*. Page from a dispersed *Bhagavata Purana* (Delhi-Agra, c. 1520-30) (Kossak 1997, Fig. 4)
- Figure 114 *Emperor Bahadur Shah II Enthroned* (Mughal, Delhi, c. 1838) (Welch 1985, Fig. 284)
- Figure 115 *Hindola Raga* (Mandi, c. 1640-45) (Purington and Newman 1985, Fig. 49)
- Figure 116 *A Festive Procession* (Jaipur, 1933) (Purington and Newman 1985, Fig. 39)
- Figure 117 Unidentified *jataka* story, Cave 1, Ajanta (c. 462-500) (Dehejia 1997, Fig. 88)
- Figure 118 Examples of fresco painting at Anandi Lal Poddar Haveli, Navalgarh c. 1920 (Shekhavati Region, Rajasthan)
- Figure 119 Kala ji and Gora ji. Fresco *buono* from the Devnarayan temple of Sanvar (19<sup>th</sup> century, Udaipur District Rajasthan)
- Figure 120 Traditional fresco *buono* by Kripal Singh (Rajputana Palace Sheraton, Jaipur 1994)
- Figure 121 Tools used in traditional mural painting
- Figure 122 Hand made brushes prepared by a *phar* painter in Chittorgarh

Figure 123 Detail of a *phar* painting illustrating the story of Devnarayan by the painter Ram Gopal Joshi (Chittorgarh)

Figure 124 Agate stone used for the preparation of wall or cloth for painting

Figure 125 The traditional painter Gopal Joshi showing the yellow outline of his *phar* painting

Figure 126 Mortar for the preparation of gum of tamarind seeds and chalk used in traditional Orissan painting (Raghurajpur)

Figure 127 Young painter employing artificial colours and cardboard (Nathdvara)

Figure 128 Traditional natural colours prepared by the painter Lalit Sharma (Udaipur)

Figure 129 *Reunion on a Moonlit Night*, from a *Bhagavata Purana* series, Pahari, 3<sup>rd</sup> or last quarter of the 18<sup>th</sup> century, from the family workshop of Seu-Nainsukh (Goswamy 1986, p. 85)

Figure 130 *When Krishna Disappears*, from a *Bhagavata Purana* series, Pahari, 3<sup>rd</sup> or last quarter of the 18<sup>th</sup> century, from the family workshop of Seu-Nainsukh (Goswamy 1986, p. 132)

Figure 131 Digambara Jaina image of Gomateshvara at Shravanabelagola (Western Gangas, 10<sup>th</sup> century)

Figure 132 Representation of weapons from a modern *citrasutra* (Raghurajpur, Orissa)

Figure 133 Representation of Mahishasuramardini from a modern *citrasutra* (Raghurajpur, Orissa)

Figure 134 Vishnu Trivikrama the Harihara temple I, Osian (Pratihara, c. 8<sup>th</sup> century) (Kramrish 1976, vol. II, fig. lxx)

## Introduction

This study critically analyses the main concepts embodying the theory of Indian painting as described in the Sanskrit texts, the *citrasutras*. A Sanskrit word meaning “treatise on painting,” *citrasutra* is a compound of two words: *citra* meaning picture, sketch, delineation, and *sutra* meaning aphoristic rule. The *citrasutras* are considered to be an important part of Sanskrit scientific literature that analyses painting within the framework of Indian philosophical thought. The word *citrasutra* is employed in this study as a general term denoting all the texts and sections of a text dealing with *citra*.

This thesis explores the content of the *citrasutras*, examines the different ways in which they have been interpreted and used in the study of Indian painting, and suggests a new approach to reading and understanding them. Today much of this research is possible thanks to a number of scholars translating, commenting on and interpreting the texts. Their works represent a great contribution to the study of this field but their views presents some limits and their preconceptions about the possible uses of a text do not permit us to wholly understand the real messages and spirit of the *citrasutras*. In this study the analysis and way of understanding the *citrasutras* will be presented in a different way. One of the aims of the thesis is in fact to draw together the various concepts expounded in a diverse range of texts. This methodology was first explored by Shukla (1957), but his analysis was somewhat superficial and involved a mere listing of concepts. This study tries to draw together, examine and compare the concepts of the *citrasutras*, and will also include concepts formerly excluded from other works, such as those of *talamana* and iconography. This is to overcome one of the main limits of current research, namely its assumption that theories from sculpture and other related arts are separated from the theory of Indian painting. This study demonstrates that it is not only difficult to strictly separate certain theories of painting from those of sculpture, but that these two artforms are sometimes treated side by side without distinction in the texts. It is on the basis of this observation that the study argues for a reconceptualisation of our understanding of the term *citra*. While it is generally translated as “painting,” it is proposed that the texts posit *citra* in a more abstract sense

as a 'mental image' that can be differently interpreted and effectuated in practice in both painting and sculpture. The ongoing tendency of scholars to separate the theory of painting as enunciated in the *citrasutras* from the theory of sculpture is thus considered here unhelpful and misleading. Indeed, the characteristically holistic outlook of Indian knowledge generally implies that the drawing of such strict boundaries between the sciences, whether art or non-art, is 'unnatural' if not a wholly foreign-imported idea. As this thesis does not seek to draw such boundaries, in some instances both sculpture and texts on sculpture will be examined in discussing the theory of painting, while parallels with, and examples from, other allied subjects such as poetics, drama and physiognomy will be discussed where appropriate.

This study also questions the tendency of scholars, such as Coomaraswamy and A.K. Bhattacharya, to find a clear and direct relationship between texts and painting. Many of the scholars considered the *citrasutras* as prescriptive texts. As a result, they found themselves seemingly confused or lost in their attempt to "unlock" the secrets of Indian painting. Many precepts are indeed not clearly stated in the *citrasutras*, but are described in the absence of drawings. It is argued here that this indicates that a painter or reader was invited to imagine in his mind the figures described. This imagining should not necessarily be taken to mean that the painter or reader of a *citrasutra* was practising *yoga* or deep meditation, as Sivaramamurti (1978) has suggested, but it is important to recognise that such activity depends on many factors, such as time, space and personal experience. In other cases the precepts are simply mentioned without descriptions of their aesthetic features. This tendency does not denote the presence of secrets, as commonly believed but it clearly indicates that concepts are taken for granted because are well known in the culture that produced them.

This study proposes that the *citrasutras* present such a wide range of different views on Indian painting that the drawing of direct links between theory and practice can become somewhat arbitrary. These views are presented more as *suggestions* rather than rules to be strictly followed, as indicated by the optative inflection of the verb employed in the texts, the tone of which does not sound like an order but as 'one should do.' These suggestions are formulated by numerous artists or writers whose identity is not known, nor ultimately knowable; they were written at varying times and places, and thus contain some differences and contradictions, although they do share the same

philosophical outlook on visual representation. What does appear clear, however, is that these writers are philosophers, describing highly hypothetical views that are difficult to put into practice and open to personal interpretation, as evidenced by the significant lack of any practical assistance to painters. Furthermore, it is difficult to analyse and understand the content of the *citrasutras* from only one perspective, as they deal with different topics, each possessing its own peculiar characteristic. Some of the sections seem to be practical lessons that instruct us how to make plaster or prepare colours and brushes. Other sections are more abstract, describing for example the perfect body shape of a man, while other sections explore or codify a range of possibilities, such as different stances in which a figure could be represented, or different kinds of shapes for the depiction of eyes, etc. The reason for this wide range of topics and characteristics lies in the organic evolution of the *citrasutras*, which present a significant development in the theory of traditional Indian painting. These new developments do not cancel the old views, but rather have been integrated into the 'science' of Indian painting.

The fallacy of regarding and interpreting the *citrasutras* as prescriptive texts is suggested by the many contradictions that appear in the study of the *citrasutras*, and in particular the discrepancies between textual images and extant painting. This study argues however, that such discrepancies are not necessarily confusing, nor should we have to decide which of the two is the valid image. Rather, both of them are valid, and such discrepancies should be accepted as a natural consequence of *citra* referring to mental images whose realisation in the practice of painting depend upon the painter's personal interpretations and understandings.

A key empirical source of data from which the critical analysis and commentary of this study draws is the application of views and experiences of living traditional painters. These will be used to strengthen one of the main points of this thesis that texts are not to be considered as guides for painters. The above arguments stem from the observation that the role of painters is often underestimated in current scholarship. Traditional scholarship has tended to consider speculation the only way to deal with texts, overlooking the vital linking role fulfilled by painters in relating art itself to the texts. Practitioners are undeniably part of the system of painting, interlinked with texts and painting itself. This argument implies that any study of Indian painting should consider these three factors, i.e. painting, painters and texts, in order to claim valid

understanding of all the aspects of painting. Any study that examines only one of these critical elements of the system of Indian painting represents a fragmentary and partial knowledge of them. Even if many traditional painters today do not know about the existence of the *citrasutras*, and many others argue that following a text would produce only a repetition of features and a fossilised art production, it is nevertheless necessary to take into consideration these three elements, as there are significant links between their conceptions of painting and those enunciated in the texts. For example, their methods of dividing the human body resemble (though do not equal) those depicted in the texts on painting and sculpture. Many other practical examples will be presented in the concluding sections of chapters 3 to 7. It therefore seems that there was, and still is, a link between texts and practice, but not a direct one, since a text did not inform a painting directly, nor vice versa. This study suggests, therefore, that the *citrasutras* should be interpreted more as a literature that *accompanies* rather than guides the art of painting, and that traditional painters constitute the vital living link to further our knowledge about the relationship between painting and texts.

It is hoped that the comparison and analysis of textual concepts will provide new insights into our understanding of the practice of painting and our interpretation of the *citrasutras*, and that an appropriate reading of the texts will eventually enable us to look at and even judge Indian painting from an *Indian* perspective.

With the focus and key arguments of the study explained, the structure of this study can be outlined. Chapters 1 and 2 are introductory, and seek to clarify the meaning and importance of the *citrasutras* as well as further articulate the original contributions to knowledge made by this study. The first chapter introduces the reader to the *citrasutras*, their translations and interpretations. The key texts and translations of the *citrasutras* are first described and explained. This is then followed by a discussion of the different ways in which the secondary literature has interpreted these texts, highlighting the limitations these pose to our understanding of them, and establishing the critical basis on which the key arguments of the study are elaborated. Chapter 2 examines the notion of painting as described in the various *citrasutras*. This chapter includes an analysis of the myths of the origin of painting, the various meanings of the word *citra*, the classification of painting and the figure of the painter as described in the

texts. All these aspects will be analysed along with their various interpretations in the secondary literature.

Chapters 3 to 8 constitute the empirical core of the research, involving a critical comparative analysis of the various concepts of Indian painting, their interpretations and their application by practitioners. They develop and substantiate the arguments underpinning the critique of current research articulated in chapter 1. Chapter 3, 4 and 5 describe the systems of measurement, proportion and posture with all their related topics. Many of the concepts discussed in these chapters, such as *mudras* and *talamana*, are considered for the first time as part of the theory of painting and are analysed in this study, whereas the secondary literature continues to regard them as confined to sculpture. Similarly, iconography, discussed in chapter 6, is generally included in studies focusing on the theory of sculpture but is considered here as a crucial element of the theory of painting. A key argument of these empirical chapters is that at the theoretical level the boundaries between sculpture, and indeed other allied arts such as dance, are non-existent. Chapter 7 describes the process of making plaster, colours and brushes according to the recipes of the texts. It also considers some scientific studies of Indian painting and their use in secondary literature, which clearly shows that scholars seek to prove or disprove the validity of the texts on the basis of their content. Chapter 8 analyses the *rasa* theory according to relevant texts, including the *citrasutras*. It also underlines the difficulties of considering the theory of *dhvani* as a concept relevant to painting. Finally, the conclusions draw together the arguments and empirical findings of the study, considering their implications for current and future research.



## Chapter 1

### The Texts, their Translations and Interpretation

In this chapter, the *citrasutras* will be briefly presented together with the scholars who have interpreted and translated them. I will start from the earliest *citrasutras* which are the *Citralakshana*, attributed to Nagnajit, and the *Vishnudharmottara*, and then examine later texts. Finally I will discuss the interpretations and ideas about them in the secondary literature to date, highlighting problems and limitations of this research.

#### The early texts

The *Citralakshana* of Nagnajit survives only in Tibetan, though it is originally a Sanskrit text. Although this research deals with Sanskrit sources, this Tibetan text is fundamental to the study of Indian *citrasutras* because at some point in its history the *Citralakshana* was translated from Sanskrit into Tibetan and it can therefore be treated as a text belonging to the Indian tradition. Today it is considered to be one of the earliest texts on the subject, together with the *Vishnudharmottara*. As it is now, the *Citralakshana* contains three chapters, though it may have been longer. This is because reference to other topics is found in chapter three, in particular there is mention of 36 types of countenances whose descriptions find no place in the text (Goswamy and Dallapiccola 1976, pp. 26-27).

The *Citralakshana* is ascribed to Nagnajit, whose identity is a matter of debate. Laufer (1913) gives a lot of suggestions for his identification: Nagnajit could have been a prince of Gandhara, a Jain monk, etc. (Goswamy and Dallapiccola 1976, p. 12). Shukla (1957, p. 10) states that Nagnajit was a “Naga king of hoary antiquity.” Goswamy and Dallapiccola (1976, p. xii) say that there are numerous mentions of persons called Nagnajit in early Indian literature: there was an Asura king of Gandhara, a master architect referred to in the *Matsya Purana*, and also a Dravida authority cited by Varahamihira in the *Brhat Samhita*, but we cannot say if any of these can be identified with Nagnajit of the *Citralakshana*.

Furthermore, the date of the *Citralakshana* composition is unknown. Goswamy and Dallapiccola (1976, p. xiii) explain that:

Unfortunately, because of the Sanskrit original having been lost, it is not possible to draw any conclusions regarding dating on the evidence of language and style. All things considered, however, we feel that the work may roughly be assigned to the early Gupta period. The mythology to which references are made in the invocation and [in] the text is developed, and [is] essentially Pauranic in its framework, and this may keep us from dating it quite as early as Laufer would have us do...Bhattacharya, on the strength to the reference to Nagnajit in the *Brhat Samhita* regards the work as having been completed by 6<sup>th</sup> century, a century that he regards as significant for the history of Vastuvidya.

If we consider the content of the text we can see that there are similarities between the Nagnajit *Citralakshana*, the *Vishnudharmottara* and the *Brhat Samhita*, so that we can accept the date of the text as “early Gupta period,” according to Goswamy and Dallapiccola.

The first Western scholar who dealt with the *Citralakshana* was Berthold Laufer in 1913, who edited and translated it from Tibetan into German. The German translation was subsequently translated into English by Goswamy and Dallapiccola in 1976, with the title *An Early Document of Indian Art*. In 1987 Asoke Chatterjee Sastri translated the same text from Tibetan into English with the title *The Citralaksana: an Old Text of Indian Art*.

The *Vishnudharmottara* is by far the most translated and interpreted of all the available texts on painting. The date of the *Vishnudharmottara* is widely contested,<sup>1</sup> but considering the affinity of content between the *Citralakshana* of Nagnajit and the *Brhat Samhita* (c. 550 AD), the *Vishnudharmottara* may also belong to the Gupta period. Shah (1958, p. xxvi) and Bhattacharya (1976, p.8) believe that the text should be dated to around 450-650 AD.

The *Vishnudharmottara* was known up to the Akbar period, according to Dave (1991, pp. 52, 58), who argues that the oldest of the manuscripts used in her work is on birch bark whose use came to an end from Akbar's time. The manuscript used by her can be dated to approximately the late 16<sup>th</sup> century and we can say that the

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<sup>1</sup> Kramrisch discusses the date of the *Vishnudharmottara* extensively (1924, pp. 2-4) and she concludes that (p. 4): “The chapters of the Vishnudharmottaram dealing with painting must have been compiled in the 7<sup>th</sup> century, contemporary with the latest painting of Ajanta,...”. Dave (1991, pp. 60-61) dates the original composition of the text between 500 to 900 AD and Shukla

*Vishnudharmottara* was transmitted in written form up to this date. This fundamental point exemplifies that a text cannot be seen as belonging to a defined period of time but rather as being continuously handed down to posterity because considered as a valid source of traditional knowledge.

The entire text of the *Vishnudharmottara* contains various topics and it is divided into three parts, the section called *citrasutra* includes chapters 35 to 43 in the third part of the text. Its first edition was published by Venkatesvara Press in 1912 in Sanskrit. It is on the basis of the Venkatesvara edition that Stella Kramrisch published in 1924 the first English version of the text entitled *The Vismudharmottaram (Part III) A Treatise on Indian Painting*. After this translation there is Priyabala Shah's edition of the text in 1958 entitled *Vismudharmottarapurana Third Khanda* in which she adds more manuscripts to the Venkatesvara edition. This edition was followed in 1978 by Sivaramamurti's *Citrasutra of the Vismudharmottara*, in which he translates the text improved by Shah offering a new interpretation of it. The best study carried on so far is Parul Dave Mukherji's *The Citrasutra of the Vismudharmottara Purana* (2001) in which in addition to the manuscripts used by Shah in her critical edition two more manuscripts from Nepal and Bangladesh are used to eliminate some problems affecting the understanding of the older editions.

### Later texts

Other important texts that contain a *citrasutra* section, and provide a wide range of interesting views on art and painting, are the *Samarangana Sutradhara* of King Bhoja of Dhara, dated to c. 1000-1050, the *Aparajitaprccha* ascribed to Bhuvanadeva dated to 12<sup>th</sup> century, the *Abhilashitarthacintamani* or *Manasollasa* of King Someshvaradeva of the Western Chalukya also dated to c. 12<sup>th</sup> century and the *Shilparatna* by Shri Kumara of Kerala, dated to the middle of the 16<sup>th</sup> century. All these texts are characteristically encyclopaedic, dealing with a wide range of topics from astrology to architecture, medicine, geography and gemmology.

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(1957, p. 10) places the work between the 2<sup>nd</sup> to 4<sup>th</sup> century AD. Priyabala Shah (1990, pp. xxi-xxvi) also discusses the probable date of this work.

The *Samarangana Sutradhara* is believed to have been written by (or at least for) King Bhoja of Dhara who was a patron of the arts and a great writer. This king was also the writer of other kinds of treatises like the *Shrngaraprakasha* on poetics. He was a great theorist and his views on *rasa* expounded in the *Samarangana Sutradhara* on painting are revolutionary with respect to the traditional views on the subject (see chapter 8).

The first Sanskrit edition of the *Samarangana Sutradhara* was published in 1925 by Ganapati Sastri. There is no complete English translation of the text but we find bits and pieces of it translated in various books. Shukla in his *Hindu Canons of Painting or Citra-Laksanam* (1957) uses parts of the text to expound the theory of painting. The original manuscripts of the *Samarangana Sutradhara* are in a poor condition, which does not easily permit making a good collated edition. This is especially true for the parts relating to painting and iconography in chapters 71 to 83. According to Bhattacharya (1976, pp. 11-13), the edition of 1925 was prepared on the basis of three manuscripts, of which only one, belonging to the Central Library of Baroda, contains the chapters relating to painting and iconography. He says, for example that the lack of a collated study has made it difficult to study the *Samarangana Sutradhara* systematically, this is true especially for the 82<sup>nd</sup> chapter, which contains the theory of *rasa* and *rasadrshitis*.

The *Aparajitaprccha* ascribed to Bhuvanadeva is a text on art and architecture traditionally associated with the *nagara* school of architecture. The text incorporates all the arts including architecture, sculpture, painting and music. The text may be dated to around the 12<sup>th</sup> century. Dubey (1987) states that the *Aparajitaprccha* is more than a century later than the *Samarangana Sutradhara*. There are a number of similarities and parallels in the texts, but the key point is that the subjects acquired from the *Samarangana Sutradhara* have been elaborated and amplified by *Aparajitaprccha* rather than examined anew (Dubey 1987, pp. 3-4). *Aparajitaprccha*, which literally means “the questions of Aparajita” is primarily an exposition of principles and practice of the science of *vastu* by Vishvakarma, who solved a series of questions put to him by Aparajita, the youngest of his four mind-begotten sons (*manasaputra*): Jaya, Vijaya, Siddhartha and Aparajita (Dubey 1987, p. 7). Unfortunately there is no critical edition of this text. Shukla reports some of the important sections of the text regarding painting

in the appendix to his book, *Hindu Canons of Painting* (1957). Dubey's (1987) *Aparajitapreccha – A Critical Study* involves a commentary and translation of portions of the text, but, the section dedicated to painting in his text is not comprehensive, nor does it show much evidence of scholarly critical research.

The *Abhilashitarthacintamani* and *Manasollasa* have been attributed to King Someshvara Deva of the Western Calukya dynasty, who ruled around 1127-1138 AD (Bhattacharya 1976, p. 16). The author mentions the date of the *Abhilashitarthacintamani* as "Friday the first lunar day of the light half of the month of Chaitra with the constellation Uttarabhadrapada of the Shaka year 1051" (Sastry 1926, p. xxiv). It is worthy of note that King Someshvara proudly describes himself as the creator or master of the art of *citra* (*citravidyavirancin*) (Man 3.905, see also Shrigondekar 1939, p. 12). The *Abhilashitarthacintamani* of Someshvaradeva was published in Sanskrit, with an English introduction in 1926 by Shama Sastry. In 1939 G.K. Shrigondekar published the *Manasollasa*. These two texts contain five sections called *vimshatis* or *prakaranas*, each of which is divided into twenty chapters dealing with all the branches of knowledge. The sections explaining painting are the 3<sup>rd</sup> *prakarana* of the *Abhilashitarthacintamani* and the 3<sup>rd</sup> *vimshati* of the *Manasollasa*. Although they have two different titles, the parts dedicated to painting of each text are believed to be identical and included in the *upabhoga-vimshati* or 'the section on enjoyments.'

The *Shilparatna* is a text written by Shri Kumara, under the patronage of King Devanarayana, who ruled in Travancore in the later part of the 16<sup>th</sup> century. Shri Kumara was a *brahman*, son of Shri Rama born in the lineage of Bhargava. He narrates the *Shilparatna* for "the enlightenment of indifferent souls" (Bhattacharya 1974, p. 59). The *Shilparatna* is divided into two parts, the first of which has 46 chapters and the second with 35 chapters. The section that we call *Citralakshana* is the 46<sup>th</sup> chapter of the first part. The entire text was edited in 1922 by Ganapati Sastri. A few years later (1926-28) Coomaraswamy attempted the first translation of the *Citralakshana* of the *Shilparatna* which was not very successful for our understanding of the text. In 1974 Asok K. Bhattacharya published a translation of the same chapter, with a commentary that claims to prove that Kerala artists used the text as a guide.

The texts mentioned above are considered, in secondary literature, the main *citrasutras*. Together with those, there is another group of texts associated with the theory of painting. These deal with topics related to painting or mention painting itself. Among them are: *Narada Shilpa Shastra* (especially chapters 66 and 71), *Shivatattva Ratnakara*, *Manasara*, *Mayamata*, *Matsya Purana*, Varahamihira's *Brhat Samhita*, *Natya Shastra* of Bharatamuni, *Devata-murti-prakarana* of Mandana Sutradhara, *Vastusutra Upanishad* ascribed to sage Pippalada, *Citrakarmashastra* ascribed to Manjushri, *Pratima-mana-lakshana*, *Shukraniti* and the *Sudhalepavidana*. These texts are equally important to our understanding of the theory of painting, but their significance has been underestimated by many scholars. In this study, all these sources will be used to clarify some important concepts of the theory.

### Interpreting the texts

The academic study of Indian treatises on painting started in the 20<sup>th</sup> century, sometime later than the study of Indian traditional treatises on architecture, which originates in the early 19<sup>th</sup> century. Dave (1991, p. 4) explains:

Ram Raz initiated this move with the publication of the *Essay on the Architecture of the Hindus* in 1834, which was a seminal breakthrough in the study of art history through the texts...However, these texts tell us more about architecture, than sculpture and painting.

Indeed, it was not until 1912 that the first publication of a text on painting appeared, the Venkatesvara edition of the *Vishnudharmottara*. This edition presented a great obstacle for many scholars, however; as it was in Sanskrit it was accessible only to a select group of people who had a combination of Sanskrit and art knowledge. The first publication in English on this subject was an article, "Painting in Ancient India," by Gopinatha Rao in 1918. In this pioneering study, Rao criticises the lack of research in this field and invited Indians to rediscover this ancient knowledge to counter the preconceptions of V.A. Smith who asserted that there were no Indian art treatises. As Rao (1918, pp. 558-9) explains:

It is the culpable disregard of the modern so called educated Indian, whose culture is one-sided and whose sense of patriotism has been killed by foreign ideals taught to him, that is responsible for the lack of appreciation of the ancient Indian treatises on art and other subjects; the absence of translations of these valuable works is construed by Europeans, as for instance Mr. V.A. Smith, as

indicative of utter absence of written works on several subjects of human interest and necessity.

In 1989, the situation does not seem to have improved. Maxwell<sup>2</sup> declares that texts are still not used in the field of Indian art, which privileges stylistic analysis as its main criteria of study. He offers his own explanation for this (p. 7):

Perhaps because they deal with smilingly abstract and elusive notion of meaning, these theories are not admitted to a central position in the discipline, which continues to see itself as fundamentally archaeological in character... The clear perception of the complementarity of meaning and style, or of text and sculpture, and their forging together into a single instrument for the understanding of historical Indian art, has thus not yet been achieved.

In reading the commentaries on the *citrasutras*, scholars constantly refer to the difficulty of translating them due to the poor condition of the manuscripts or the complexity of specialised, technical vocabulary. Bhattacharya (1976, pp. 4-5) explains the extent of this obstacle:

The magnitude of the problems involved in the study of *Silpa* texts is well known. Reading of the texts, so far handed down to us, is fraught with difficulties. Copyists' errors stand in the way of getting many of the technical works in their original forms. Besides, damages and mutilation of the texts of the manuscripts, sometimes in important sections, constitute a serious handicap to the study of our subject. Another difficulty lies in the proper interpretation of the *paribhasa* or *lingua technica* of the artists, not infrequently met within the texts.

While one should not underestimate the difficulties faced by translators or writers of collated editions of Sanskrit manuscripts, the "mutilations of the texts" per se do not constitute a handicap to our understanding. The widely shared attitude of Bhattacharya reflects the normative preference to work with word by word translations in which every single line must make clear sense. However, this demand for clarity can ultimately never be met since many precepts were written in particular contexts and are thus not fully understandable to modern interpretation. It is necessary in my opinion, therefore, to shift our focus away from the unattainable ambition to explain every single line of a text to appreciate its arguments. More emphasis should be placed on seeking to understand the essence or importance of the texts, even if we do not actually understand the whole of it. However, many writers remain anxious to find clear answers, while their long speculations fail to reach any critically informative conclusions.

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<sup>2</sup> See the article "Silpa versus Sastra" in Dallapiccola (ed.) *Shastric Traditions in Indian Arts*, 1989, vol. 1, pp. 5-15.

In spite of these problems of translation, our understanding of the texts is not necessarily fragmentary. A collective reading of the *citrasutras* enables one to gain a good grasp of the philosophical outlook and science of Indian painting. The problems identified above result mostly from the attitude of scholars towards the *citrasutras* as 'texts' to be translated, who often focus too heavily on small unclear portions or words, without trying to develop a more holistic, lucid understanding of the system of the theory of painting. In other words, it was the way in which they treated the texts that did not permit them to further their understanding of the real messages and spirit of the *citrasutras*.

The root of such limitation in these studies lies in the conceptions the writers and commentators have of the *citrasutras*. Their reading of the texts has been shaped and developed by a romantic-transcendental view of Indian art in which there has been a prevalent though unacknowledged expectation of some kind of revelation from the texts. This conception of Indian painting has been further coloured by the widespread construction of Indian knowledge as having been developed by various ancient Indian canon-makers, who not only wrote the texts on theory but whose systems of rules were also strictly followed by painters.

Such constructed conceptions of Indian painting are evident right from the first interpretations of the *citrasutras* by Western scholars, which established the structural logic for later studies. Laufer (1913), who was more concerned with Tibetan and Chinese art, clearly exemplifies this in the preface written for his German translation of the *Citralakshana* of Nagnajit (Goswamy and Dallapiccola 1976, p. 4):

For me, personally, the rich collection of Tibetan paintings and ancient Chinese Buddhist sculptures and bronzes that await study emphasized the necessity of searching for the underlying spiritual basis on which this art of East Asia is founded; and for this we must of course turn towards India...[the Citralaksana] will doubtless become a text of fundamental importance in helping us understand a series of phenomena, both in Tibetan and Chinese painting, that up till now we could not comprehend.

This quotation clearly demonstrates that Laufer conceptualised the *Citralakshana* as belonging to the place where it was found, i.e. Tibet and China, and that, consequently, it revealed the "phenomena" of art from that region. Afterwards, however, with great disappointment, he realised that the awaited revelation did not come from his translation of the *Citralaksana*, admitting that: "I am fully conscious that



many matters still stand in need of further explanation” (Goswamy and Dallapiccola 1976, p. 5). These expectations of Laufer are shaped by his conceptualisation of the *Citralakshana* as a prescriptive text or, as he calls it, a “collection of practical rules” for the painter to be followed (p. 30). He suggested that only those elements indicated by the text were to be followed in a prescriptive manner, and that the painter was free to experiment with regard to those elements not mentioned by the texts. He believes, for examples that the measurements of the *cakravartin*<sup>3</sup> are strict rules for painters, while as for the depiction of other kinds of men and women, there was assumed to be complete freedom for the painter. The fact that the text limits itself to the description of the *cakravartin* led him to conclude that this text does not embody a proper theory of painting (Goswamy and Dallapiccola 1976, pp. 28-30):

We notice here the important fact that the scheme of exact measurement is given for the Cakravartin and does not apply to the other figures which can be made according to the discretion (of the painter), provided the proportions are rendered correctly. From this we see that the prescriptive formulae did not bind the artist in any straitjacket and gave him freedom in the matter of his creative expression... The work does not at all embody a proper theory of painting; on the other hand in it are laid out the bodily auspicious signs (*lakshanas*) of the Cakravartin for the guidance of the painter... The result is a collection of practical rules.

Later writers such as Coomaraswamy (1918) rebutted Laufer’s position somewhat by denying any freedom of the artist and arguing that the texts give complete instructions and answers to the artist’s problems. He states (p. 98):

The artist does not choose his own problems: he finds in the canon instruction to make such and such images in such and such a fashion – for example, an image of Nataraja with four arms, of Brahma with four heads, of Mahisha-mardini with ten arms, or Ganesa with an elephant’s head.

Bhattacharya (1974), in following this position, believed in a strict relationship between text and painting, and was convinced that the *Citralakshana* of Shri Kumara was a manual for Keralan painters and that even the most general rules were followed by them (p. 28):

The general instruction of the text, “the picture should be painted in various beautiful colours along with proper form and sentiments (*rasas*), moods (*bhavas*) and actions”, seem to have been the guideline of the Kerala painters.

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<sup>3</sup> *Cakravartin* is usually a universal monarch or emperor of the world. In the *Citralakshana* of Nagnajit the *cakravartin* is simply a stereotype who represents the best of man, and constitutes an ideal model (see also chapter 3).

Bhattacharya argued that a text belongs to a particular time and that the rules of the *Citralakshana* are applicable to the 16<sup>th</sup> century painting of Kerala. However, we have seen for example with the *Vishnudharmottara* that a text is continuously transmitted to later generations and thus cannot be seen as necessarily 'belonging' to a particular period. There is also the possibility that the *Shilparatna*, like many other texts, existed in oral form before it was written in manuscripts. Furthermore, Bhattacharya argued that a text of a particular place, such as the *Shilparatna*, influenced the art of painting in the place where it was written. This idea is somewhat too narrow and misleading, as it again does not take into consideration intertextual influences, and the fact that such texts were being transmitted all over India and beyond. A text did not belong to a particular place or school of painting - the Indian *Citralakshana* of Nagnajit for example, was adopted by the Tibetans. His position is very difficult to prove because of the abstract nature of the texts. Nevertheless scholars such as Bhattacharya strongly assert a fixed temporality and spatiality of texts, which appears to originate from a desire to express his Keralan nationalistic feeling. In reference to the *Citralakshana* of Shri Kumara he posits that (1974, p. 17):

For ascertaining the importance of a treatise on art, it is necessary to determine its value in the contemporary creations. Hence, it would be worthwhile to examine how far the instructions laid down in a canonical text had their bearing on contemporary as well as immediately following practices...[N]o other Indian text on painting can be so assuredly connected with a particular school or art trend, as we can connect it with the late medieval Kerala murals. It would not be out of place, therefore, to take into account the achievements of the Kerala painters for a proper appraisal of the Citralaksana.

The view of a fixed temporality and spatiality of texts is not shared by Anand Krishna (1977), who believes in a direct relationship between medieval Rajasthani, Pahari and Mughal painting and the *citrasutra* of the *Vishnudharmottara*. He says (pp. 270-271):

...the text does not fail to include another popular view that the common man was more inclined to richness of colour (*varnadhyam*). This comment corresponds to the strong palette of Rajasthani-Basohli styles rather than to "Classical" painting at Ajanta or Bagh. Another iconographic feature, "waves, smoke and streamers" should be shown according to the Citrasutra "fluttering in the air according to the movement of the wind"...Stylized treatments from this class appear both in early Rajasthani and Mughal schools...

Taking a more instrumentalist approach, Jayanta Chakrabarti (1980 and 1985) on the other hand, considered the *citrasutras* as a tool that could be used to decode the peculiar vocabulary of Indian painting, without which many of the figures and iconography employed in painting could not be understood with their full implications. However he also falls into the tempting trap of conceptualising a hidden truth of Indian painting that only texts could explain (1985, p. 124):

...no proper or critical study of Indian painting is possible without studying the Sanskrit texts and literature which provide the basic material and information – technical as well as aesthetic – throwing light on and giving indication of what could not be guessed and understood.

Chakrabarti (1980, pp. 3,11), in examining Indian murals belonging to ancient, medieval and late medieval periods, also tries to prove the validity of viewing the *citrasutras* as prescriptive texts. He goes further however to state that texts and painting compensate each other in the sense that what we find in texts we do not understand in painting, and vice versa. Again, this view is permeated by a strong belief in some sort of revelation contained in the texts which would “unlock” the soul of Indian painting (1980, p. 3):

Taken separately, the murals and the silpa texts remain as torsos, incomplete and fragmentary, providing only partial glimpses, but failing to reveal the whole. Yet taken together, they go a long way for making good the respective gaps, filling the bare regions in the maps of each, making concrete what seemed vague and giving indication of what could not be guessed. The extant murals and the available silpa texts are complementary to each other...A study in which early Indian mural paintings are made to throw light on the silpa texts and the silpa texts themselves to throw light on the murals and the techniques in them is long overdue. It is our humble endeavour in this present study to accomplish this task with whatever thoroughness that is possible in view of the situation discussed above...Once this is done, we can say that we have in our possession the key to unlock the very soul of Indian painting,...

In a more recent study by Priyabala Shah, which involves a comparison of the information of the *Vishnudharmottara* with the paintings of Ajanta and Bagh, she claims to find evidence that the particulars described in the text have been ‘followed’ in their illustrations. She highlights the injunctions of *adhyaya* 35 of the *Vishnudharmottara* as being followed by painters (Shah 1990, p. xxx):

Characteristics of *cakravartins* like webbed fingers of hands and feet, a tuft of hair between the two eye-brows can also be illustrated in painting and sculptures of the Gupta period. Similarly a study of the paintings would show that instructions of our text regarding postures, *mudras* or hand-poses, *rasadrstis*-

sentiments and moods expressed by eyes and many such artistic observations are almost universally followed.

The above overview has demonstrated that the way in which the *citrasutras* have been treated and interpreted by scholars in the secondary literature to date has been shaped by the speculations and conjectures of the writers. Such conjectures have been based on two key preconceptions about the *citrasutras*. First, scholars have been preoccupied with the conceptualisation of the texts as prescriptive 'manuals' to be followed by painters. Second, they have assumed, or rather hoped, that the texts contained the secrets of Indian art whose revelation can be attained from 'unlocking' their complex verses. These conceptualisations of the *citrasutras* are dominant, if not popular, in the secondary literature, although the research has provided little substantive evidence to support their validity. Furthermore, the prescriptive conceptualisations of the texts ignore the reality of the relationship between texts and the practice of art. Indeed, scholars' views are premised on a logically flawed understanding of texts and painting as static worlds, whereas they are dynamic and interrelated, developing through an organic inter-exchange of concepts.

Yet this logical point has surprisingly not been taken into account by scholars, who remain steadfastly committed to conceptualising the *citrasutras* as prescriptive, revelatory texts. Indeed this is more surprising when one considers the fact that this point was raised early in the beginning of research on the *citrasutras* by Shama Sastry, who expressed extreme pessimism about their use (1926, p. xii, xxiii):

It cannot be believed that the Dravidian Sudra artist had in his mind the rules laid down in this work for his guidance. This art seems to have been hereditary and handed down from generation to generation from remote past and pedantically systematised here for nobody's good... It cannot at all be believed that the Sudra or Dravidian artists and artisans had these and other rules in their mind when they used their pen, brush or chisel in drawing, painting or sculpture.

While Sastry's views may be somewhat exaggerated, they clearly point to the fallacy of believing that texts could ever necessarily be considered as complete guides by painters. However, Sastry's views have not been given due recognition in the secondary literature; in fact my reading of the research on the *citrasutras* conducted to date suggests that they have been completely excluded. What we see here, therefore, is the construction of a metanarrative by scholars interpreting the *citrasutras*, whose

hegemony has somewhat precluded critical analysis of the relationship between texts and painting in India. It is suggested that this current state of research requires a new theoretical and methodological approach to examining, interpreting and understanding the *citrasutras*.

### **Towards a new theoretical and methodological framework**

It is suggested that instead of considering, from the outset, the *citrasutras* as manuals or prescriptive canons representing the 'essence' or absolute standard of Indian painting, they should be treated as texts, open to a variety of possible interpretations that may be different, if not wholly contradictory. Although texts remain the central focus of this study, my analysis seeks to clarify our understanding of their content without forgetting that the *citrasutras* only constitute a theoretical position rather than the reality of Indian painting. This study attempts to reflect upon the wide-ranging diversity of interpretations of the *citrasutras*, stressing all the while that these are merely *subjective* readings of the texts and that no one interpretation can be seen as the objective 'truth.' This is not to suggest that the propositions of the *citrasutras* are not at all reflective of the reality of Indian painting; rather this theoretical approach of recognising the diversities and uses of the *citrasutras* seeks to broaden and deepen our understanding of their relevance to the practice of visual representation.

This implies that research needs to move beyond its preoccupation with regarding texts as static, fixed entities and standards of Indian painting on the one hand, and treating the actual practice of art as a subsidiary phenomenon that has or should follow these standards on the other. The study takes the theoretical position that texts are dynamic, organic structures that attempt to organise and classify painting according to abstract hypothetical propositions that do not have a fixed temporality or spatiality and are subject to change. This change, however, does not just mean temporal or spatial change. It refers also to the different ways in which the texts are subjectively interpreted by theorists and painters themselves. As regards the actual practice of painting, this study stresses the role of painters as individual practitioners who use a combination of traditional knowledge passed down from their teachers and their own aesthetic

imagination. It is argued that this role can critically inform our understanding of the *citrasutras* through a comparison of textual content with the living reality of Indian painting. My theoretical framework thus involves treating texts and the practice of painting as neither separate nor symbiotic entities, but as dynamic systems that indirectly interact and inform each other.

This theoretical approach has immediate implications for the methodology adopted in this study. The first is that it is necessary for my analysis to draw together the various concepts expounded in the diverse range of texts that have relevance for the art of painting. This is to overcome the limits of current research, which methodologically only examines the concepts of one particular text and thus cannot be seen as representative of the complete textual content of the *citrasutras*. Although Shukla (1957) pioneered this methodological approach, he did not pursue it to its fullest extent; his analysis tended to involve a mere partial listing of concepts without engaging in any critical, comparative examination to highlight the degree of their complexity. The concepts were then followed by a list of painting, without any explanation on how texts may have informed painting or vice versa. Other studies that show a similar intent are Bhattacharya (1976) and Chakrabarti (1980). These two works treat material and method of Indian painting as explained by the *citrasutras*, without involving in a comparative study of the texts and exemplifying how texts and practice are correlated. They simply treat texts like a blue print to verify their validity with reference to mural painting. They also ignore texts on allied sciences, which are considered here fundamental to our understanding of the theory.

Second, in building on this, the study attempts to examine the diversity of interpretations and practical applications of these concepts by practitioners of painting and sculpture. This constitutes the bulk of my fieldwork, which involves interviewing a range of painters and sculptors from major centres of art activity in India who practise their art in the traditional way. It is hoped that this comparison of textual concepts of the *citrasutras* and the views and approaches of art practitioners will provide new insights into not only understanding the practice of painting itself, but also our interpretation of the *citrasutras*. In particular, it is envisaged that this theoretical and methodological approach will highlight the partiality of our understanding and will enable us to view Indian painting from an *Indian* perspective.

The following chapters are built on, and develop, the theoretical and methodological framework explained above. Chapters 3 to 8 constitute the core of this research, involving a critical comparative analysis of the concepts of Indian painting with their interpretations and applications by practitioners. First however, we must turn to chapter 2, which systematically compiles and examines the concept of painting together with its related topics, such as the myths and classification, from the various *citrasutras* and their range of interpretations.

## Chapter 2

### The Traditional Indian Concept of Painting

On the basis of the theoretical and methodological framework of this work, the present chapter examines the way in which the *citrasutras* introduce painting to the readers, the myths of its origin, the meaning of the word *citra*, the figure of the painter and its classification. All the *citrasutras* explain painting in their own ways but they have many aspects in common. One of these aspects is that of the divine origin of the arts. Painting is introduced in the *Citralakshana* of Nagnajit and *Vishnudharmottara* with the narration of a myth that emphasises the importance of traditional authorities such as Vishvakarma and Nagnajit. The chapter then analyses the meaning of the word *citra* according to textual sources. It will be emphasised that this word may have a different significance from its common meaning of painting, referring instead to a more abstract connotation of “mental image,” i.e. an image that works in the mind of the reader of a given text. The auspicious and inauspicious signs of a painting are also mentioned. This is to emphasise the importance of concepts like proportion, stances and colours, which are fundamental in the theory of painting as expounded in the *citrasutras*, but often underestimated by art historians. This chapter also highlights the discrepancy between the figure of the painter with his characteristics as seen by the writers of the *citrasutras* and the painter described in secondary literature. Finally, the chapter concludes with a critical analysis of the classification of painting and its interpretations. All these aspects of painting are expounded and discussed with reference to a wide range of texts, thereby providing a reasonably comprehensive overview of the theory.

#### The myths

According to Indian philosophical thought, arts and crafts have a divine origin. The divine origin of painting is explained in the texts through the narration of two main



myths which recognise Vishvakarma<sup>1</sup> and Nagnajit as the two main authorities in this field. The authority of Vishvakarma (Figures 1 and 2) is undisputed even today, with some artists claiming ancestral links to him.<sup>2</sup> The importance of Vishvakarma as the authority is reflected in the myths of the creation of *citra* as narrated in the *Citralakshana* of Nagnajit and the *Vishmudharmottara*. The myth narrated in the *Citralakshana* is also important for its mention of Nagnajit as the founding father of painting on earth. Nagnajit is mentioned also in the *Brhat Samhita* and according to this text he seems to have been a writer on *dravida* architecture and sculpture.<sup>3</sup>

The myth narrated in the *Citralakshana* of Nagnajit is presented as “the antecedents” or “the tale of the past” of painting. The myth<sup>4</sup> narrates that there was a wise king, who had the true knowledge of *dharma* and that at his time people lived for a hundred thousand years during which there was neither sickness nor premature deaths. One day, however, a *brahman* came to him crying because his son died at a very young age.

The wise king called King Yama, the God of the Dead, and asked him: “You have taken away the son of this good *brahman*. Make this *brahman* happy, please return his son to him.” Yama answered: “My independence is limited and I don’t have the power to return or free his son. All beings are subject to my powers because of the reward that their own deeds (*karma*) merit.” The argument turned into a fight. The king started to let countless rainshowers fall powerfully upon Yama. Yama let fall the fearsome rainstorm of *pretas*<sup>5</sup> who hurled arrows at the king. The king defeated the

<sup>1</sup> Vishvakarma or Vishvakarman (lit. omnificient) seems to have originally been an epithet of any powerful god, as of Indra and Surya, but in the course of time it came to designate a personification of the creative power. In this sense Vishvakarma was the great architect of the universe (Dowson 1992, p. 363).

<sup>2</sup> During my trip to India, in September 2001, I met a painter in Udaipur, Lalit Sharma, who belongs to a family of traditional painters. He traces his line of descent from Lord Vishvakarma in Ellora. He possesses the record of his genealogy up to the present day. His family from Ellora moved to Kashi, Pali, Nathdvara and finally Udaipur.

<sup>3</sup> The *Brhat Samhita* (BrSam LVIII.4) mentions that according to Nagnajit the face of an idol should be 14 *angulas* long and 12 *angulas* broad (see also Bhat 1981, introduction p. XXII and p. 550).

<sup>4</sup> Here the myth of the origin of painting will be presented summarising the translation of Goswamy and Dallapiccola (1976, pp. 63-79 of NagCitLak I.30-431).

<sup>5</sup> A *preta* (lit. departed, deceased) is the spirit of the dead person especially before obsequial rites are performed (Monier-Wiliams 1994, p. 711).

*pretas* with his sword and that is how the leaders of the army of Yama were subdued. As Yama saw that the king was winning the battle, he swung his mighty club, which was capable of subduing anything. As the king saw the club, he yelled in rage and picked up the weapon with the sign of the head of Brahma on it. Brahma realised that all the creation would suffer and so came down to the earth with the other gods. When Yama and the king saw Brahma, they put their weapons down, folded the palms of their hands, and began arguing anew. Brahma kept them from fighting again and told them that because of the good and bad deeds that this boy had committed earlier, he was born in the form of a human being, and has died early. Brahma ordered the king to paint a handsome picture resembling the son of the *brahman*, in his likeness, and using colours. The king painted the boy and Brahma gifted that painting as a living person to the *brahman*.

After this, Brahma said to the king: "May you conquer the naked *pretas*.<sup>6</sup> No messengers of Yama will see the light of day anymore. Because all the naked *pretas* came to you, you shall be named 'Conqueror of the Naked' (Nagnajit) and through performing sacrifices you will become the most famous, too. You painted the *brahman*'s son and brought the first picture into the world of the living. Because of the benefit the world will get from this, you have established your claim to reverence. From now on this picture will gain a place of eminence. May blessings and good fortune radiate from it, and may all sins be avoided."

Later, the king went to the Brahma's home and asked about the proper way of measuring the body's form. Brahma said to the king: "I will reveal the excellent secrets of this to you. First of all, the Vedas and the performance of offerings came into the world. In order to raise a *caitya* (place of worship), one must paint pictures. For this reason painting is counted as knowledge (Veda). I am the first one to have painted pictures of human beings and it is I, therefore, who have taught mankind the skill of painting. Go therefore to Vishvakarma, and he will instruct you briefly in the characteristic attributes, rules, and the measurements of the painting."

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<sup>6</sup> This passage has a double meaning. It also signifies 'may you become the Conqueror of the Naked' or 'Nagnajit'. From here onwards the king is in fact identified with Nagnajit the founding father of painting on earth (see also Goswamy and Dallapiccola 1976, note 55, p. 70).

The king (Nagnajit) took Brahma's advice and went to find Vishvakarma. Vishvakarma explained to the king: "The *Citralakshana* is honoured by the gods themselves, it describes the measurements, composition and colours, and is taken to be the principal work by all learned men. It comes from good lotus-born god (Brahma). Brahma has painted all the forms of all the bodies to signify the welfare of the believers and imparted this knowledge to me (Vishvakarma) first. What kinds of measurements one should work with, which objects and means are beautiful, I got all of this from Brahma. It is thanks to him that I have made all works of art. When I teach you about the nature of the measurements and the characteristic attributes, about proportion, form, ornamentation and beauty, then you too will be fully versed in all the skills and will become a universally known and masterly expert in the art of painting."

The text continues with the dialogue between Vishvakarma and Nagnajit in chapter II, and in chapter III Vishvakarma instructed by Brahma explains the rules of proportion to Nagnajit. The myth of the origin of painting as narrated in chapter I explains how Nagnajit became the authority of the science of painting and how the first painting came into being in this world. The myth underlies also other points such as the importance given to measurements, proportions, beauty and colours. These aspects are relevant to the Indian perception of painting and they will be reiterated many other times in all the *citrasutras*.

The myth can be considered the traditional Indian origin of painting and of his founding father Nagnajit. Laufer (1913) however tried to speculate on the myth to find answers to who Nagnajit was and what kind of painting he painted. He thinks (Goswamy and Dallapiccola 1976, pp.12-13) that Nagnajit has this title not only because he overpowered the *pretas* but also because he above all is the first among men who painted a portrait. He states:

This portrait represents a dead body, a *preta*, who is shown nude, and when Brahma commends the king warmly to continue in the future as a 'conqueror of the nude' (Nagnajit), it signifies nothing else than that he shall henceforward devote himself to painting. The instruction on the measurements imparted by god Vishvakarman relate to the nude human form and this shows that ancient Indian painters, in the first place studied the human form in its nudity and represented gods, kings and heroes as nude.

The myth narrated in the *Citralakshana* does not mention that the portrait of the young *brahman* was representing him naked; this is a supposition of Laufer's. The young *brahman* is not described as naked, nor as dead. The portrait given to the father was, according to the myth, a human portrait, and more interestingly, it was a substitute for the living body of the boy. The portrait was given to the father to remember the semblance of his son.

Laufer (Goswamy and Dallapiccola 1976, note 11, p. 13) considers the myth as proof that in ancient India there was a fashion of painting nudity and continues stating that:

The comment of E.B. Havell (*Indian Sculpture and Painting*, p. 217, London, 1908) 'painting nudity for its own sake, or as a test of skill, was never the aim of an Indian artist' refers naturally only to the late medieval phase of Indian painting, if this generalisation has any validity at all. It is unnecessary to point out that the representation of the nude in ancient India, as in the culture of primitive people in general rests on completely different psychological basis than our 'nude paintings' which have only an aesthetic aim.

Building on these conjectures (1976, p. 15), and taking as example a painting he has read about in a book, he notes that: "These observations receive striking support from the most ancient fresco-paintings of India, in the Jogimara caves, belonging to the III cent. BC...the brief descriptions by Bloch suggest that nude figures predominate in those." From his speculation it is clear that Laufer, by emphasising nudity and its hypothetical significance in Indian painting, was underestimating the great emphasis given by the text to the Indian paradigms of proportions, measurements and so forth. Moreover, he also seeks to distinguish between "our" (i.e. Western) nude painting and the nude in ancient India, which is treated as inferior and primitive.

Another myth of painting to be considered is that narrated in the *Vishnudharmottara*. The myth is narrated by Markandeya to Vajra and says that the first painting was produced by Narayana according to the science of *citra* (ViDha 35.1-5, see Sivaramamurti 1978, p. 167; Dave 1991, p. 67; Shukla 1957, pp. 24-25 and Shah 1990, p. 135). The myth says that the rules of *citra* were produced long ago by the sage Narayana for the benefit of the world, when he was engaged in penance at his

hermitage. While he was practising penance, the *apsaras*<sup>7</sup> came to disturb his concentration. Roaming amorously and culling flowers they were seen by Narayana, who could easily discern their purpose. To mislead the *apsaras* that approached him, he created Urvashi by drawing a picture on his thigh using mango juice. By means of the science of *citra* Urvashi was endowed with beautiful form, and became the best *apsara*. Ashamed as they beheld her, all the *apsaras* went back. Having thus created a picture perfect in all its definition and principles of portrayal, the great sage Narayana made the immovable Vishvakarma receive this knowledge.

Moreover, the *Vishnudharmottara* (III.2.1-9) introduces a discourse, where Markandeya instructs Vajra that without a knowledge of the science of dancing the rules of painting can scarcely be understood. This part, containing the dialogue between Markandeya and Vajra, is not a section of the *citrasutra*, but it is fundamental to understanding how painting was perceived by ancient Indians. This section in fact places painting and the science of painting in a wider perspective together with the other arts. This informative passage of the *Vishnudharmottara* explains how all the arts are correlated to each other and stresses the need to know all of them in order to perform painting. The following section is Kramrisch's translation of the passage (1924, pp. 25-26; see also Shah 1990, pp. 5-7):

Vajra said: (Oh) sinless (one) speak to me about the making of images of Gods, so that (the deity) may remain always close by and may have an appearance in accordance with the sastras.

Markandeya said: (Oh) Lord of men he who does not know properly the rules of *chitra* can, by no means, be able to discern the characteristics of images.

Vajra said: (Oh) propagator of the race of Bhrgu narrate the rules of painting, as he who knows the rules of painting alone knows (its) characteristics in words.

Markandeya said: Without (a knowledge of) the science of dancing, the rules of painting are very difficult to be understood: hence no work of (this) earth, (oh) king should be done even with the help of these two, (for something more has to be known).

Vajra said: Please speak to me about the science of dancing and the rules of painting you will tell me (afterwards) for, (oh) twice born one, the rules of the science of dancing imply (those of) painting.

Markandeya said: The practice of (dancing) is difficult to be understood by one who is not acquainted with music. Without music dancing cannot exist at all.

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<sup>7</sup> *Apsaras* are the nymphs of Indra's heaven (Dowson, 1992).

Vajra said: (Oh) you, who are conversant with dharma, tell (first) about music and (then) you will speak about the science of dancing (because) when (the former) is well known, (oh) best of the Bhrgus, (a man) knows dancing too.

Markandeya said: Without singing music cannot be understood. He who knows the science of singing is the best of men and knows everything.

Vajra said: (Oh) best of those who support dharma, please speak to me about the science of singing as he who knows the science of singing is the best of men and knows everything.

The narration of myths is not present in the *Brhat Samhita*, in fact, Varahamihira,<sup>8</sup> the writer of this compilation does not consider necessary the use of myths to ascertain the importance of the arts or their authorities. In the first chapter or *adyaya*, Varahamihira says: "Avoiding trivial matters of very little practical importance such as long-drawn queries and answers, interesting legendary stories as well as the origin of planets, I shall here explain the real facts in their essential features along with all their benefits" (BrSam 1.11 in Bhat 1981, p. 6). This passage is significant particularly as the *Brhat Samhita*, being one of the oldest texts containing relevant verses on painting, directly contradicts in this respect the *Citralakshana* and the *Vishnudharmottara*, which regard the use of myths as a fundamental element to understanding painting. The approach of the *Brhat Samhita* is followed by later texts too. They only mention Vishvakarma as their authority and the divine origin of painting and other arts becomes an absolute precept.

### The meaning of *citra*

Apart from such myths, the *citrasutras* explain painting in other ways, too. One key approach is to discuss the manifold meanings that the word *citra* presents in these texts. This word is generally used as synonymous with painting, but in some texts and in some

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<sup>8</sup> The term *samhita* denotes a compilation that condenses many *shastras*. It thus often includes details of many subjects found in varied works. Varahamihira (505 AD), the writer of the *Brhat Samhita*, was a scientist and was held in high esteem by scholars of ancient and medieval India. In this text, he revived the ancient learning of astronomy and astrology, which was fast disappearing. Varahamihira had several predecessors in the field of *samhita*, whom he mentions by name. He expresses his indebtedness to ancient sages like Vishvakarma, Nagnajit, Samudra and Garga. In every chapter he invariably mentions the authorities of the topic to be discussed. Whenever he differs from their views, he gives his own reasons for it (Bhat 1981, pp. xi, xv).

contexts *citra* has a much wider, if not wholly different, meaning, referring to visual representation.

Laufer (1913) is the first to express doubt on the meaning of the word *citra*, arguing that it implies a different connotation from simply painting. He thinks that the science of physiognomy (features of human beings) is one of the possible sources from which painting arose and that therefore the word *citra* is connected with this science. This view is based on the fact that the *Citralakshana* (I.10-29) also mentions, together with Nagnajit and Vishvakarma, Prahlada a famous physiognomist.<sup>9</sup> Laufer is correct in his observation that a bond existed between the *Citralakshana* of Nagnajit and the texts on physiognomy, a point that becomes particularly evident when we compare portions of chapter III of the *Citralakshana* and the chapter called *Purushalakshana* of the *Brhat Samhita* (68). Laufer (Goswamy and Dallapiccola 1976, pp. 30-32) explains that:

I have strong doubt if Sanskrit *citra* and the corresponding Tibetan *ri-mo* can be used in the general sense of our word 'Malerei' (painting), signifying the art of painting... what is more important is that this present connotation of *citra* is really derivative and secondary, and not primary. The word *Citralakshana* is originally a term of physiognomy and signifies 'the characteristic signs of the bodily lines', specially of the hand and the fingers. The most important characteristics of the Cakravartin are taken from physiognomy and from there inducted into painting... from this we can speculate or surmise that a strong bond existed between the texts on art and physiognomy, or at least that a common fund of technical expressions was shared by them. In this *a priori* supposition I have not gone wrong, because the reading of both the treatises on physiognomy in the Tanjur indicates that the majority of *lakshanas* of the Cakravartin enumerated in the *Citralakshana* are described again with the same Tibetan expression from which we may conclude that the corresponding terms in the Sanskrit original were also identical; from this we might further learn why certain characteristics attributed to the Cakravartin can be understood only with reference to the domain of physiognomy... Like painting, the science of physiognomy concerns itself with the signs of the bodies of human beings (*lakshana* or *vyanjana*).

Dave (1991, pp. 380-381) concurs that the author of the *Citralakshana* was a *samudravat*, as is evidenced by his detailed knowledge of the variety of traits in human anatomy. The science of physiognomy or *samudrika shastra* describes perfect models

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<sup>9</sup> According to Varahamihira (BrSam 68.1), a physiognomist or *samudravat*, is one who carefully observes the height, weight, gait, compactness, strength (based on the seven basic ingredients), complexion, glossiness, voice, natural character, courage, hereditary elements (those that suggest the particulars of one's previous life), parts of the body and natural lustre of a man, and then explains his past and the future.

and appears more concerned with a physiognomic context rather than painting, but it became an important source for the *Citralakshana*. Even if many traits described for the *cakravartin* are not necessary for a painter and are understood only with reference to the texts on physiognomy, we do not have reason to doubt that the *Citralakshana* of Nagnajit was a text on painting. The word *lakshana* or “characteristic sign” can be used in both sciences, but the word *citra* in this context denotes painting. One should consider physiognomy as one of the sciences that influenced the development of the discourse of painting in the same way in which music, singing and dance are relevant to the *Vishnudharmottara*.

The *Shilparatna* explains that *citra* can be divided into three types: *citra* denotes sculpture in the round, *ardhacitra* means relief and *citrabhasa* indicates painting or more properly a semblance (*abhasa*) of *citra*. *Citra* and *ardhacitra* should be done either in clay, stucco, wood, stone, metal or brick. With these materials *citra* and *ardhacitra* should be made as seen and as heard of by the artists; and they should be adorned with various colours (SR 46.1-7a in Bhattacharya 1974, p. 41).

Apart from these textual explanations, it should be stressed that sometimes for an appropriate understanding of the *citrasutras* one should think of *citra* as an abstract entity. The word *citra*, when it is used in the *citrasutras*, denotes a mental image, it is a word used abstractedly by the writers to explain the theory of proportion, stances and so on, so that this image becomes the base on which we think about the theory of painting and sculpture. Moreover, in the word *citra* there is not yet a division between painting and sculpture but both are still in a mental state. Shah (1990, p. xxx) supports this view, arguing that the word *citra* is used in the *Vishnudharmottara* to denote both painting and sculpture. She demonstrates how many verses on painting in the *citrasutra* are applicable to *pratimalakshana*, which is the section immediately following the *citrasutra* (ViDha III.44-85). In fact, the *pratimalakshana* takes for granted the technique of the *citrasutra* and explains the characteristics, vehicles and symbols of deities. The section detailing the process of making the image of Brahma, for example, states that it should be made according to his characteristic marks, and that he should be made in the form of a painting (*citra*) or an idol (*pustakarma*) (ViDha 44.5-8 in Shah 1990, p. 167).



### The concept of painting according to the *citrasutras*

The *citrasutras* explain painting with descriptions of its main characteristics, especially auspicious and inauspicious marks. These descriptions in particular emphasise the importance of fundamental concepts such as measurement, proportion and colours.

According to the *Vishnudharmottara* painting is the most excellent of all arts and grants *dharma*, *artha* and *kama*.<sup>10</sup> A house with a painting is considered auspicious (ViDha 43.38 in Dave 1991, p. 325). The text also explains that just as Sumeru is the most excellent mountain, Garuda is the chief amongst birds, the king is best of all men, painting is the best of all the arts<sup>11</sup> (ViDha 43.39 in Dave 1991, p. 325). Markandeya in his dialogue with Vajra also states that all the rules explained in the *citrasutra* are only a summary, for it is not possible to relate the rules in detail even in many hundred years. He also explains that what has been left untold should be understood from dance, and what has been left untold in dance is to be improvised from painting (ViDha 43.36-37 in Dave 1991, p. 325). Moreover, the rules of painting should be followed also for sculpture, and apply to metals such as gold, silver and copper (ViDha 43.31 in Dave 1991, p. 324).

The *Vishnudharmottara* explains that the ornaments of a painting are the lines, shading, decoration and colour. The masters (*acarya*) praise the lines, critics (*vicakshana*) the shading, women the ornamentation and common people the richness of

<sup>10</sup> *Dharma*, *artha* and *kama* constitute the so called *trivarga* or three aims of life of a high caste Hindu (*dvija*).

<sup>11</sup> This passage (ViDha 43.39) is very significant because of its similarity with a section of the *Citralakshana* of Nagnajit (NagCitLak I.327-374 in Goswamy and Dallapiccola 1976) which states that: "Just as the greatest mountain is Sumeru, and just as the one who soars to the heavens (Garuda) is the first among the egg-born; just as the king is the first among human beings, so is painting the first among the skills. Just as all the rivers flow into the great ocean, just as the planets are dependent upon the sun, just as the *rshis*, like the gods, are dependent upon Brahma, in the same way all skills depend, in truth, upon painting. Just as Sumeru is the greatest among mountains, just as Ganga is the foremost among rivers, and just as the Sun is the foremost among the planets, just as the king of the birds (Garuda) soars heavenwards, just as Indra is the first among the gods, so is painting the foremost among skills." This similarity is a clear example of intertextual relationship. The verses are also a proof of the common ground from which *Citralakshana* and *Vishnudharmottara* developed.

colours. Keeping this in mind, a painting should be done carefully in such a way that it captivates the minds of everyone. The text also explains that the site of painting should be well smeared, spacious, free from insects, bright, pleasant and secluded. A painting made with lines that are smooth, clear, of a beautiful colour, and represents a dress appropriate to the particular country, without lacking in proportion, is an extraordinary one (ViDha 41.10-15 in Dave 1991, pp. 229-230).

The *Vishnudharmottara* enumerates the merits (*gunas*) and demerits (*doshas*) of painting in a detailed list. The following are said to be the eight merits of a painting: 1) postures; 2) proportions; 3) the use of plumb-lines; 4) charm; 5) details; 6) verisimilitude; 7) the loss and; 8) gain (*kshaya* and *vrddhi* or foreshortening). This text adds that an auspicious painting is one that incorporates such a high degree of verisimilitude (*sadrshya*) that it appears to be smiling, alive and breathing; the use of plumb-line makes it look as if it were talking and reaching out (lit. embracing) the onlooker. A good painting annihilates bad dreams and propitiates the house deity, and the place where a painting is installed does not appear to be empty (ViDha 43.19, 21-22a, 26 in Dave 1991, pp. 321-323). A painting which is being made carefully according to the instructions and to time and age becomes auspicious, otherwise it becomes its opposite. A painting that is imbued with postures, beauty, playfulness and sentiments, as visualised by a discerning mind, is thus believed to fulfil desires (ViDha 42.84-85 in Dave 1991, p. 286).

As for the demerits in a painting, the *Vishnudharmottara* explains that these include weak or thick lines, lack of variety, oversized eyes, lips and cheeks, inconsistency and deviations from the rules of proportion. Other demerits of a painting include lack of details, crooked lines and the undue merging of colours. Moreover, a painting that lacks postures, sentiments, has figures with vacant stare, is dirty and bereft of life is considered to be unpraiseworthy (ViDha 43.7b-8, 17b-18, 20 in Dave 1991, pp. 229-231).

Similar to the *Vishnudharmottara*, the *Citralakshana* of Nagnajit emphasises the auspicious and inauspicious elements of a painting. A good painting is described as one in which the principles of measurement, and consequently of proportion, are followed. This approach might be traceable to a religious reason, i.e. the image to be worshipped

must be perfect in all its aspects so as to have an auspicious power. The *Citralakshana* states that (NagCitLak II in Goswamy and Dallapiccola 1976, p. 79): “the art of measurement in painting is based on the worship of all the gods, which leads to the augmentation of their fame and to the banishment of sins and fear...” For this reason a painter is expected to grasp the fundamentals of measurement. The ultimate purpose of the act of painting seems to be the worship of an image which is the incarnate of all the auspicious elements and contains proper measurements and proportions. The *Vishnudharmottara*, too, emphasises this point, stating that learned men worship the image that has proper form, made according to the injunctions of the *citrasutra*, and in turn get all their desires fulfilled, both in this world and the next (ViDha 1.7 in Shah 1990, p. 3). This point can be found in other texts too, as for example the *Pratima-mana-lakshana* (Banerjea, 1941), which emphasises auspiciousness and inauspiciousness of images.

Vatsyayana (c. 3<sup>rd</sup> century) mentions the art of painting as one of the 64 complementary sciences of the *Kamasutra*, together with dance, singing and instrumental music. Yashodhara (13<sup>th</sup> century), in his commentary of the *Kamasutra* of Vatsyayana, explains that painting has six limbs (*shadanga*) or six essential qualities. They are *rupabheda* (distinction of form), *pramana* (proportion), *bhava* and *lavanyayojana* (the infusion of emotion and grace), *sadrshya* (likeness or verisimilitude), *varnika bhanga* (division of colour) (Shastri 1929, pp. 29-30).

While attempting to explain the concept of *citra*, the *Aparajitaprccha* (Dubey, 1987) states that the world is represented in *citra* in the same way as the moon is represented in water. The text mentions that *citra* is the incarnation of *rupa* or form. Since *rupa* is fundamental to all arts, the text specifies that *citra* as an art expresses itself through line and colour. The colour or *varna* expresses a *bhava* or feeling in every *citra* (ApaPr 224.11-19; 232.17; 228.18, see Dubey 1987, p. 408). The *Aparajitaprccha* treats *varna* (colour), *rasa* (aesthetic experience), *rekha* (line sketch) and *bhushana* (decoration) as the essential elements of painting (ApaPr 232.17-18, see Dubey 1987, p. 409). The text also refers to *citrabhumi* (background) and *vartana* (shading) as essential constituents of pictorial art (ApaPr 230.30; 231; 236.23, see Dubey 1987, p. 410).

Some of the constituents of painting described in the 12<sup>th</sup> century *Aparajitapraccha*, may be traced in the 11<sup>th</sup> century *Samarangana Sutradhara* which mentions eight limbs (*ashta anga-s*) of painting, to which an artist should adhere for achieving success as a painter. These eight limbs constitute the eight technical steps essential for a good wall painting. They are different from the six limbs of Yashodara which emphasises aesthetic rather than technical virtues. Although the text referring to the eight limbs of painting in the *Samarangana Sutradhara* (SamSut 71.24-25 in Sastri 1925, vol. 2) is damaged, they may be identified as: 1) *vartika* (the making of brushes); 2) *bhumibandana* (application of plaster); 3) *lepyakarma* (final coating); 4) *rekhakarma* (sketching); 5) *varnakarma* (colouring); 6) *vartanakrama* (shading); 7) *lekhakarana* (outlining) and; 8) *dvicakarma*, which has been amended by Coomaraswamy as *dvikakarma* (second and final lining) (see Dubey 1987, p. 410; Dave 1991, p. 430 and Bhattacharya 1976, pp. 92-96).

According to the 16<sup>th</sup> century *Shilparatna* (Bhattacharya 1974), all palaces and gateways should be decorated with various paintings to enhance their beauty. The text defines *citra* as the representation of objects in accordance with their individual nature, movable and immovable, as found in the three worlds. The *Shilparatna* proceeds explaining that painting or *citrabhasa* should be executed on the glossy surface of plastered walls, in all suitable internal and external places by depicting auspicious stories and images of deities. Scenes of war, even between gods and demons, death, misery, performances of ascetics and depiction of naked figures should not be executed in the human residence.<sup>12</sup> On wall surfaces, bigger paintings should be drawn depicting the benevolent stories narrated in the Agamas, Vedas and Puranas. These pictures should be painted in a range of beautiful colours, applying them neither too much nor

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<sup>12</sup> A similar list of auspicious and inauspicious themes is to be found in chapter 43 of the *Vishnudharmottara*. This text explains that scenes such as the preparation of battles, funeral grounds, the tragic, death, pain, people tormented with grief and the villainous, bulls without horns and elephants without trunks are regarded as inauspicious and they are not allowed to be painted in houses. They are only permitted in the royal assembly halls and the temples. Those painting that are regarded as auspicious such as the nine treasures (*nidhi*), the *vidyadharas*, the sages, the *garuda* and monkey are to be painted in the houses. The portrait of oneself or self-portrait must never be made in one's own house (43.13b-17ab in Dave Mukherji 2001, pp. 244-247).

too little, to meet the requirements of forms, sentiments (*rasas*), moods (*bhavas*) and actions; and these would be variously rewarding for the patron and the painter. Apart from these, the inauspicious painting, which produces bad effects, should neither be painted nor caused to be painted if one desires happiness in both the worlds (SR 46.7b-13 in Bhattacharya 1974, pp. 41-42).

We know that Indian traditional painting is narrative in its character and that the stories depicted in painting are also found in literature (Agamas, Vedas, Puranas). This tendency was taken for granted by many writers of the *citrasutras*. With the *Shilparatna*, we find the only instance in which this important aspect of painting is clearly explained. Bhattacharya takes the opportunity to reiterate that Kerala painters were literally following the rules of the text, forgetting that this feature is shared by all Indian traditional painting. Bhattacharya (1974, pp. 27-28) comments that:

It has always been noted that the themes depicted by the Kerala painters were usually the stories narrated in the Agamic and Puranic literature; and this fully agrees with the injunction of the Citralakshana, according to which the stories recorded in the Agamas and Vedas and the Puranas should be represented in painting. They also followed the axiom of the text that in painting "all objects, movable or immovable, found in the three worlds", should be depicted in their respective nature... Besides, the suggestion given at the outset by the composer of the text, that all the palaces, religious as well as secular, and gate-ways (*gopurams*) should be decorated with paintings, appears to have been fully accepted by the builders of the age... Hence, it is clear that principles of painting laid down in the *Citralakshana* are the reflections of usual practices of the contemporary Kerala artists.

Chapter 71 of *Narada Shilpa Shastra*<sup>13</sup> introduces another explanation of *citra*. According to Narada, pictures are to be such as to captivate our minds and give joy to our eyes. They are to be proportionate, conforming to the rules relating to pose and to the lines that determine pose. They must be of several colours and brilliant. Ornaments must be gilded and set with gems. The picture in general should be auspicious and with lovely forms (Raghavan 1935, p. 19). Narada says that painting is for the pleasure of gods, for the satisfaction of the presiding deity of the building and also for beauty. Painting is divided into three kinds on the basis of where it is done: on the floor, the

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<sup>13</sup> The *Narada Shilpa Shastra* is a *shilpa* treatise available in manuscript form in the MSS Library of the Theosophical Society of Adyar, Madras (Raghavan 1935, p.15). Due to the impossibility of seeing the original text, the translation used here is Raghavan's (1935).

wall and the ceiling. These various kinds of painting, sometimes on carvings, with various materials, of artificial designs and natural forms, permanent (*tatkalika*) and temporary (*shashvatika*), should be made in abundance on various surfaces in accordance with general measurements, in even lines and in conformity to the rules regarding pose-lines (71.1-8 in Raghavan 1935, p. 24). In all places *citra* shall be in even lines, auspicious, shining with various ornaments and neither more nor less in respect of lines. It should depict stage-experts or fighters in action and, depending on the different places, various subjects, animals, *devas*, *gandharvas*, *yakshas*, *kinmaras*, *vidyadharas* and men should be drawn (71.17-18 in Raghavan 1935, pp. 24-25).

### The painter

Another important element of painting introduced by the *citrasutras* is the figure of the painter himself with his characteristics. His role is described by the texts very briefly, which has permitted some scholars to use their own ways to describe this important and active figure. The painter is not described in great detail; there is no one chapter dedicated to his figure in the *citrasutras*, however it is possible to construct an idea of him from various verses and sections of the texts.

The *Vishnudharmottara* says that an expert painter is one who is able to paint neck, hands, feet and ears unadorned. He should be able to paint the distinction between the apparent depth and projection and between a person sleeping full of consciousness and a dead person devoid of vitality. An expert should also be able to paint waves, flames, smoke, flags and garments etc. with the speed of the wind<sup>14</sup> (ViDha 43.27-29 in Dave 1991, p. 323).

According to the *Citralakshana* of Nagnajit an expert in the art of painting is one who has the knowledge of the nature of measurements and the characteristic attributes, the proportion and forms, ornaments and beauties. An expert is one who can capture the

<sup>14</sup> Dave (1991, p. 336) translates "with the speed of the wind" referring to the speed with which an expert painter paints, criticising Sivaramamurti and other scholars as having seriously mistaken the meaning of *vayugatya*, which they translate as "moved by the wind" referring to the effect the painter is able to give to a painting, that is, his skill in painting waves, flames, banners etc.



likeness of men, of sages, one who can represent cheerful persons and is able to represent scenes which are difficult and require concentrated attention. A good painter is one who can paint according to the rules the various types of sages, *nagas*, *yakshas*, *rakshasas*, *pretas*, *asuras* and *pishacas* (NagCitLak I.375-431 in Goswamy and Dallapiccola 1976, p. 75).

The *Shilparatna*, on the other hand, states that a painter should paint gods, men, animals, reptiles, birds, trees, creepers, mountains and seas, ascertaining their forms either by hearing or by seeing or just by imagining them,<sup>15</sup> and that he should draw them in crayon at an auspicious moment, remembering them again and again, seated at ease and possessing a resolute mind (SR 46.37b-39 in Bhattacharya, 1974, p. 45).

According to the *Shivatattva Ratnakara*<sup>16</sup> (VI.2.7-9 in Krishnamurthi 1995, p. 322), a painter or *citraka* should paint pictures and portraits on flawless walls. He should be efficient, well-versed in technique, proficient in drawing minute sketches, clever in measuring, skilful in drawing pictures, competent in applying colours, and ready to put effort into mixing them.

The *Abhilashitarthacintamani* (AbhCint II.3.139-140 in Sastry 1926, p. 195) says that as a painting is the source of various *rasas*, it should be painted by a painter having sentiment, having a taste for the beautiful or poetical, that he should be a skilful and knowing man, proficient in drawing fine lines, skilled in glittering compositions, experienced in drawing on leaf and skilled in filling sketches with colours.

The *Manasara*, one of the greatest treatises on Indian architecture, on the other hand, places the painter as part of a hierarchy of craftsmen, deriving from a divine descent. The *Manasara* (II.11-12, 17-20) refers to the origin of the divine architects Vishvakarma, Maya, Tvashtri, and Manu from the four faces of Brahma and further elucidates that the sons of these architects were respectively *sthapati*, *sutragrahin*,

<sup>15</sup> Bhattacharya uses in his translation the term "meditation." This term, however, in the Indian context could mislead the reader. It is worth saying that what Bhattacharya translates as "meditation" does not refer to the word *dhyana* (meditation) but to the word *manas* (mind). The literal translation of this would be "with the mind."

<sup>16</sup> The *Shivatattva Ratnakara* of Keladi Basavaraja (known also as Basavappa Nayaka I, who ruled from 1694 to 1714) is a text from the South Indian tradition. It is divided into nine books or *kallolas* and each *kallola* consists of several chapters. *Kallola* VI contains the section on painting (Krishnamurthi, 1995)

*vardhaki* and *takshaka*. As regards the area of their activity, proficiency in painting was regarded essential for *vardhaki*, in draughtsmanship for *sutragrahin* and in carpentry for *sutradhara*. The same text accords to *sthapati* a rank of 'the director general' and 'consulting architect,' and to *sutragrahin*, a status of supervisor over *vardhaki* and *takshaka*. These injunctions to some extent clarify the roles and relationship of different types of artisans in the scheme of art activity in the past. The *Manasara* does not mention the word *citrakara* to indicate a painter, but according to his duty the painter is called either *vardhaki* or *sutragrahin*. According to Misra (1975, p. 52) the treatises on iconography, as well as other texts, clearly indicate that the title *citrakara* was synonymous with sculptor. This emphasises once more the double meaning of *citra* as referring to both painting and sculpture.

It is quite possible to develop a clear idea about the conceptualisation of the painter and his role, therefore, from the texts. He is described in a realistic way that accords to him a certain degree of independence. This point is overlooked by some scholars in their attempt to prove that Indian art is transcendental, and who in turn add words like meditation, idealisation, *yoga* and contemplation in their interpretations of the texts. Sivaramamurti (1978), for example, in his introduction to the *Vishnudharmottara* (p. 2) describes the painter as someone absorbed in meditation:

The painter in India is almost like a *yogi* lost in his art. In fact, for painting or preparing sculptural forms of deities, he had to reverently muse and visualise *dhyanaslokas*, sit in a holy attitude of peace facing east and produce the picture with great devotion.

A similar approach can be found in Dubey's comment on the *Aparajitaprccha*. Bhuvanadeva, the writer of the *Aparajitaprccha*, observes that the process of painting presupposes the identification of the painter with the visible animate and inanimate world (ApaPr 224.18). Dubey (1987, p. 408) however argues that:

...the act of painter or artist is the act of a seer or a *yogi* who identifies subjects with the object. This art is contemplative or meditative. As G.C. Pande says, in a state of contemplation and absorption the artist spontaneously expresses the idea in its intuitive immediacy or imponderable vividness. The imaginative content is referred not to the real world but to that of ideal essences. The representational character of form in painting is more or less idealised to correspond to some mental idea or impression. The painter does not draw from nature but from within.



Sivaramamurti and Dubey therefore take advantage of a textual source to prove their ideas that the painter was a *yogi*. However, this position is not supported by the textual evidence examined above. The traditional painter in ancient and contemporary India is a craftsman who knows the technique of painting through a master, but who, as the *Shilparatna* suggests, needs to use his own mind (*manas*) to create his works. He is supposed to know and apply in an imaginative, aesthetic and scientific way the rules of measurement and proportion, so as to create auspicious paintings. The texts therefore do permit the painter to apply his own experience and world view.

### Classifications

Some of the *citrasutras* seek to divide painting into classes according to their characteristics. The classification of painting according to the texts analysed can be summarised as follows:

**Table I**  
**Classification of painting**

Texts	Classifications
<i>Vishnudharmottara</i>	<i>satya, vaishika/vainika/daishika, nagara, mishra</i>
<i>Manasollasa and Abhilashitarthacintamani</i>	<i>viddha, aviddha, bhavacitra, rasacitra, dhulicitra</i>
<i>Shilparatna</i>	<i>rasacitra, dhulicitra</i>
<i>Aparajitapreccha</i>	<i>nagara, dravida, vyantara, vesara, kalinga, yamuna</i>
<i>Narada Shilpa Shastra</i>	<i>bhauma, kudyaka, urdhvaka</i>

The *Vishnudharmottara* explains that a painting is said to be of four types: *satya*, *vainika* (*vaishika*<sup>17</sup> or *daishika*),<sup>18</sup> *nagara*, and *mishra*. Whichever painting bears a similarity with the world is called *satya*. That which has elongated figures, is large in size, delicate, well-adorned, regular, completely filled, in which the figures are firm and plump and is rich in the use of the perpendiculars for proportion and postures, is called *vainika* (*vaishika* or *daishika*). Paintings in which the whole body of the figures is firmly developed, in which shading (*vartana*) is employed widely, and which have few garlands and ornaments, are called *nagara* paintings. A *mishra* painting is known to be a combination of the above three types (ViDha 41.1-5 in Dave 1991, p. 228).

It is difficult to comprehend fully the styles of painting delineated by this classification and to classify painting according to these types. Difficulties also arise in understanding the writer precisely when *mishra* paintings are mentioned, since these contain a combination of characteristics from the other three types. The root of such difficulties lies in the culture-specific origin and development of this classification. As a result, many scholars tend to suggest their own personal ideas about this classificatory system without taking into consideration the culture that produced this kind of work, adding freely inappropriate ideas like the frame for painting or the distinction between sacred and profane painting. Another approach is that of Sivaramamurti (1978) who thinks to explain the types by a mere juxtaposition of verses with extant sculptures, as can be seen in figures 3, 4 and 5, without actually engaging in a clear explanation of

<sup>17</sup> Dave (1991) is the first writer to call the second type of painting *vaishika*. All the other authors call this type *vainika*. Dave's amendment follows the reading of a Nepali manuscript of the *Vishnudharmottara*. The same manuscript contains both the denominations *vainika* and *vaishika*. Dave (1991, p. 231) says that this amendment with *vaishika* is the correct one because the word *vainika* in this context provides no appropriate meaning. She cites many supporting examples, such as the mention in the *Arthashastra* (II.27.44) of the art of the courtesans, of which painting is one, as *vaishikakala*, and the use of the word *vaishika* in the *Natya Shastra* (25.1-2) to describe a lover of a courtesan who is also a connoisseur of all arts (Dave 1991, pp. 231-235). The problem of discerning and clarifying this meaning remains, however, since the word *vaishika* appears only in one of the manuscripts of the *Vishnudharmottara*. Moreover, the word appears together with *vainika*, thus making it difficult to accept all the examples cited by Dave and in turn amend all the verses of the other manuscripts of the *Vishnudharmottara*.

<sup>18</sup> Dave Mukherji (2001) reinterprets her previous findings with a new possible reading of this class of painting, using the word *daishika* to replace the terms *vainika* and *vaishika*. Her reinterpretation is based on a reconstruction of the word from the *nevari* script, explaining that *daishika* derives from *desha* (provincial, local) as opposed to *nagara* (urban) (pp. 164-165).

how textual evidence informed practice. Sanskrit etymology does not help much in the reconstruction of a valid meaning of the words. In spite of this we can appreciate the verses as a proof of the awareness of different types or styles of painting in ancient India. Raghavan is the only scholar who takes a dismissive approach to classification (1933, p. 905):

My impression is that even to its author the exact import of these names was not clear. The text seems to have been written after a cut in the flow of tradition of the artists who were using these words as paribhasas.

Kramrisch (1924) explains the classification of the *Vishnudharmottara* adding the particulars of the frame that are not present in the text. Her improbable translation of *vainikam* as “lyrical” is an idea shared with Coomaraswamy (1929). Kramrisch says (p. 6):

The paintings were executed in various types, wall-painting, pictures on board and on canvas were equally frequent...If framed they were of oblong, square and round shape and the Vishnudharmottaram accordingly distinguishes 4 types of pictures: (1) *satyam*,...true, we may say realistic, in an oblong frame, (2) *vainikam*,...which may mean lyrical, in square frame, and (3) *nagaram*,...of the citizen, genre-pictures in round frames, while the fourth type simply is *misram*,...mixed.

Coomaraswamy (1929, p. 25-26) also has his own interpretation of the classification, arguing that *satya* means “pure” or “spiritual”, *vainikam* “lyrical” and *nagara* “urban” or “secular.” These translations with their interpretation, however, must be seen as speculations as they are not based on any substantive evidence from the *Vishnudharmottara*. The idea that in *nagara* painting “the ideal of proportion is not required” implies that Coomaraswamy probably completely misunderstood this concept of the *citrasutras*, as the concept of proportion is central to the Indian theory of painting. His position is justified as follows:

The “pure” and “lyrical” kinds are both regulated by the rules of *pramana*, but in the first case a longer limbed, i.e. superior type is specified. In the pure style the figures are to be nobly posed, whereas in “lyrical” painting all sort of poses are to be seen. The fact that the subject may pertain to “any sphere” shows that figures of deities are implied. All these considerations indicate that *satya* must be understood in the sense of *sattvika*, “pure” or “sacred” (as distinguished from “profane”) and has nothing to do with truth in the sense of verisimilitude...Accordingly, the subject of “lyrical” and “urban” painting are of this world only...It can hardly be doubted, then, that “lyrical” is emotional

narrative painting, and the term would apply especially to illustrations of the Epics... In "urban" painting, ideal of proportion is not required. It is hard to see exactly the point of "adorned with very few garlands", perhaps this means *en deshabille*. The ultimate meaning of nagara is here, indeed "erotic", having to do with love and pleasure, the term nagara, literally "urban", has often the sense of elegant, *de bon ton*, smart, etc.

Priyabala Shah has given an entirely different interpretation of the terms *nagara* and *vainika* (Sivaramamurti 1978, p. 68). She argues that, given the analogy of the divisions of styles in architecture as *nagara*, *dravida* and *vesara*, these have a geographical basis and represent different styles from particular regions. She identifies *nagara* as a northern variety with special reference to Mathura as the greatest art centre in the north. Similarly, she derives *vainika* from Vena after the river Krishnavena in south India. However, the classification of the *Vishnudharmottara* is based on the characteristics of figures rather than necessarily any place; it is therefore improbable, on the basis of such evidence, to locate paintings geographically.

According to Dave (1991, pp. 427-429) the *satya* type constitutes a general category which encompasses any painting that bears a resemblance with the world. *Vaishika* (or *daishika*) and *nagara* function more as subtypes and represent a further classification of the *satya* on the basis of the degree of naturalism involved. According to Dave the existence of *mishra* painting as the fourth type which resulted from a combination of the three types points to an absence of a rigid differentiation between the styles.

The classification of the *Vishnudharmottara* thus remains difficult to explain and understand. Kramrisch, Coomaraswamy and Shah were of little help in this respect, while only the later editions of Dave (1991 and 2001) seek to clarify this interesting classification. Although in Dave's editions many of the linguistic problems are solved with the discovery of new manuscripts, it remains difficult to apply this classification to paintings.

In the *Manasollasa* and *Abhilashitarthacintamani*, the classificatory system is similarly complex and poses problems for our understanding. According to these texts, the exact copy of an object as we find in a reflection is named as *viddha* while mere resemblance is called *aviddha*. A picture that expresses the *rasas* as *shrngara* is called

*bhavacitra*. The one with bright powdered colours is named *dhulicitra* and the one made with fluid colours is called *rasacitra* (Man III.1.900-904, AbhCint III.939a-940b; see Shrigondekar 1939, p. 12 and Sastry 1926, p. 281). The term *rasa* here conveys two different meanings. When it is associated with *bhavacitra* it means sentiment (see AbhiCint III.941b-942a). When it is used in the compound *rasacitra*, the word *rasa* means fluid solution; this kind of painting is associated with *dhulicitra*, a painting in which powdered colours are used (AbhiCint III.942b-943a). These two types are said to be temporary painting (AbhiCint III.944a).

Although the text does not further explain the classification, Misra (1982, p. 112-113) attempts to clarify the *viddha* and *aviddha* types according to his own ideas about the classification. He says:

The *viddha* type of pictures is the exact copy of an object. It is a realistic portrait like the reflection of an object in a mirror. It appears to be the *satya* type of painting of Vishnudharmottaram...The *aviddha* type of a picture depends on mere resemblance. It is like a sketch drawn by memory by an artist. It gives only a few lines which are sufficient to indicate the similarity of an object. Thus the *viddha* and *aviddha* types of pictures mentioned by Somesvara go side by side.

Expressions like “a sketch drawn by memory” or the use of “a few lines” to paint an object refer to Misra’s own speculation and are not substantiated by any evidence from the texts. These very same ideas are also expressed by Raghavan (1933, pp. 905-907).

Types that do find proof in actual painting however, are *dhulicitra* and *rasacitra*. Their identification is easier because they are explained on the basis of their technique and not on vague aesthetic characteristics. Raghavan (1933, pp. 905-907) says that *dhulicitra* is the Tamil *kolam* painting which is drawn with white flour on the floor of houses. Steinmann (in Dallapiccola (ed.) 1989, p. 480-481) says that *kolams* are drawn either with white (in rare cases coloured) stone powder or rice flour, or powder of quartz stone or chalk which is slowly trickled from the fingers of women. Also in the classification of the *Shilparatna* there is the *dhulicitra* type which is called *ksanika* or temporary by Shri Kumara. Narada in his *Narada Shilpa Shastra* calls this type of picture *bhauma* or ‘drawn on the floor’ (Misra 1982, p. 112-113). *Kolam* is one of the folk arts of Tamil Nadu but is not limited to that region. Raghavan has probably taken

the example of Tamil Nadu because the text in question is from south India. However the practice of this folk art is well-known in many other parts of the country and also has different names, for example *alpana* and *rangoli* (Steinmann in Dallapiccola (ed.) 1989, p. 477).

The other type of painting mentioned by Someshvara with *dhulicitra* is *rasacitra* or a picture drawn by coloured solution. The difference between the *dhulicitra* and *rasacitra* lies in their technique. Raghavan (1933) says that *rasacitra* is another variety of *kolam*. This type of *kolam* is also drawn in some Tamil houses. Steinman (Dallapiccola (ed.) 1989, p. 481) also relates the existence of this kind of folk art. He explains that sometimes the *kolam* is drawn with liquid paste made of powder and water. This kind of *kolam* is traced with the help of an old piece of cloth or a sponge which is dipped into a reddish brown paste made from red top soil.<sup>19</sup>

The description made in the *Shilparatna* says that there are two types of painting, one is *dhulicitra* and the other is *rasacitra*. It defines *dhulicitra* as a temporary painting drawn on the ground after having separately powdered all the pigments. The text explains that a *rasacitra* shows the resemblance of a figure as truly as the reflection in the mirror, and at the sight of which one would at once experience amorous (*shrngara*) and other sentiments (*rasas*). This type of painting, which captures eyes and minds of all viewers, should be performed along with characteristic qualities on the wall surfaces of palaces and other establishments (SR 46.145-148b in Bhattacharya 1974, pp. 58-59).

The classification here is not as complex as in the other texts, and it is also possible to identify some similarities with the classification of the *Manasollasa*. *Rasacitra* and *dhulicitra* of the *Shilparatna* are similar to *bhavacitra* and *dhulicitra* of the *Manasollasa*. This also means in this instance that there is an intertextual relationship of these two south Indian texts. The two might have drawn on common sources or, as Raghavan (1933) suggests, Shri Kumara has borrowed ideas from Someshvara.

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<sup>19</sup> To know more about *kolam* drawing see Steinmann's article in Dallapiccola (ed.) *Shastrict Traditions in Indian Arts*, 1989, vol. 1, pp. 475-491.

The *Aparajitaprccha* refers to six types of painting termed *nagara*, *dravida*, *vyantara*, *vesara*, *kalinga* and *yamuna*. *Nagara* originated in the east, *dravida* in Karnata, *vyantara* in the west, *vesara* in the north, *kalinga* in Kalinga and *yamuna* in all the regions (ApaPr 229.1-2). These types of painting are associated with colours and castes: *nagara* has white colour and is associated with *brahman*, *dravida* is associated with red and *kshatriya*, *vyantara* is associated with yellow and *vaishya*, *vesara* is associated with green and *vaishya*, *kalinga* is associated with green and mixed caste, and *yamuna* with all the colours and all the castes (ApaPr 229.3-4, see also Dubey 1987, p. 416). The *Aparajitaprccha* offers a different classification according to the region of provenance. However it is difficult to label painting according to this classification. The *yamuna* type for example does not derive from the Yamuna region but from "all the regions." There is, however, no painting style that is produced with the same characteristics over all the regions in India. This classification could be purely symbolic, as we see for example in the case of the association of painting with the caste system. There is also the association of different colours with the various types of painting. This does not mean that each type of painting had a predominant colour. Colours have a symbolic value, as seen in the theory of *rasa* where each *rasa* is also associated with a distinctive colour (see chapter 8).

The *Narada Shilpa Shastra* (Raghavan, 1935) offers a different division of painting and according to the place where it is made there is a different theme. As mentioned previously, painting is divided into three kinds: of the floor (*bhauma*); of the wall (*kudyaka*) and; of the ceiling (*urdhvaka*, lit. raised, lifted up). In the case of *citra* of the floor, divine Narada says that painting should be made on the door-step, in front of the house, in the veranda, in the courtyard, in halls of various shapes, in bed-chambers, in the centre of any place, or in the dining halls. They should be of square design, or with lines inside of a square, of the forms of various birds, in designs of elephants, horses and serpents facing each other, and with a combination of various objects or of various materials (71.9-11 in Raghavan 1935, p. 24). In the case of *citra* of the walls, the gods wish the following to be drawn: *devas*, *gandharvas*, *yakshas*, great sages and great kings hunting or engaged in other activities; and, in the courts and storeys, at the neck of pillars, the fillets below them, and in the buildings of one or more storeys, the

forms of brave warriors in action, showing their strength or engaged in taming wild beasts (71.12-14 in Raghavan 1935, p. 24).

## Conclusions

The above discussion has raised a number of issues and points that can be summarily integrated by way of conclusion. First, it has demonstrated that while each text expresses different ideas about painting or *citra*, they all share some basic notions, which are constantly reiterated, and which appear to suggest a relatively unified theoretical foundation of Indian painting. In particular, the notion of a divine origin of painting is widely shared among these various texts, especially the earlier ones, which narrate this through two main myths. Although later texts do not narrate any such myths, they recognise the undisputed authority of Vishvakarma, the divine architect of the universe, mentioned quite often along with other sages. While accepting the role of Vishvakarma, texts like the *Citralakshana* and the *Brhat Samhita* refer to another authority, namely Nagnajit, who is supposed to have created the first painting on earth and mastered the theory of proper measurements and proportions from Vishvakarma himself. However, the mythological figure of Nagnajit only appears in early texts, whereas the figure of Vishvakarma is not only narrated in the texts, but his image is venerated in temples, and prints of this god can be seen on the walls of traditional painters' studios, especially in Rajasthan (Figures 1 and 2).

The second conclusion that can be drawn from this discussion is that of the link between painting and other arts. This is emphasised by one of the passages of the *Vishnudharmottara* (III.2.1-9), which points to the correlation of the arts. This section clearly suggests that painting cannot be understood without a wider perspective of appreciating the arts of dancing, music and singing. The essence of this instruction is taken as a model in this study, in which texts of other disciplines, like for example the *Natya Shastra*, are examined in order to understand some of the concepts of the *citrasutras*.

Another key point demonstrated in this chapter, is that the term *citra* refers to a wide variety of meanings. Apart from its more common connotation of painting, the



most relevant of its meanings appears to be that of *citra* as a “mental image.” In a mental image there is no clear distinction between painting and sculpture. While reading a text, in fact, the theory should be considered as abstracted from reality, i.e from practice. The concept of a mental image is used in the texts to explain the theory, as following chapters will reveal in depth.

Closely linked to the divine notion of the arts is that of the auspiciousness attached to painting in the *citrasutras*. Each text explains the auspicious characteristics of painting in different ways, but they stress common notions such as those of measurement, proportion, beauty and colours, which are examined in depth in the following chapters. It is generally emphasised that the degree to which a painting can be considered auspicious or inauspicious depends upon the capacity of a painter to grasp and use all these notions together.

Another point demonstrated in this chapter is that the painter is considered by the texts as someone capable of using all the notions of the *citrasutras*. He is someone who can integrate and interweave the textual notions with his own ideas and skill to create a painting. However, according to my fieldwork, this textual and abstract position remains difficult to demonstrate. Present day practitioners do not support this view, claiming that they do not need texts to perform their arts. They also stress that the technique they use has been taught by their fathers and handed down by their ancestors. In spite of this, a comparison between texts and practice will demonstrate in the next chapters that these two realities share common grounds and notions, and that texts do not contain strict rules but rather suggestions, possibilities or a way of reasoning. Textual and practical views on the painter do not reflect the ideas shared by scholars like Sivaramamurti and Dube, who attribute to the painter the status of a *yogi*. This view appears quite frequently in secondary literature, but it is supported neither by texts nor by practice.

Finally, the analysis of the various approaches to classifying painting into types further suggests that texts are about ideas more than rules. Every text enumerates different typologies of painting. Sometimes these classificatory notions are recognisable in paintings as *dhulicitra*, but the majority of times the various types of painting remain

subject to interpretation. They are thus difficult to apply as a standard of critique for paintings.

## Chapter 3

### Systems of Measurement and Proportion

This chapter presents two fundamental concepts of Indian painting: measurement and proportion. Measurement and proportion or *mana* and *pramana* are the essential principles of form. They are introduced with their peculiar terminology which constitutes the basis for reading and understanding the *citrasutras*. This chapter analyses the absolute and relative systems of measurement, it describes different types of *angula* measurement, and explains the various measurements that can be taken along the body of an image. The system of proportion expounded in this chapter includes physiognomy and the iconometric system. The role of physiognomy is analysed in accordance with the *Vishnudharmottara* and *Citralakshana* of Nagnajit, and relying on two other texts: the *Brhat Samhita* (chapters 68-69) and *Saravali*,<sup>1</sup> whose views seem to share a common ground with the *citrasutras*. Iconometry is expounded according to the views expressed in the *Vishnudharmottara* and *Citralakshana* of Nagnajit, and is widened with the help of other important texts like the *Brhat Samhita*, *Matsya Purana*,<sup>2</sup> *Pratima-mana-lakshana*<sup>3</sup> and *Shilparatnakosha*.<sup>4</sup>

<sup>1</sup> The *Saravali* is a text on Indian astronomy and astrology written by Kalyanavarmam. The writer must have flourished before the 10<sup>th</sup> century (Santhanam 1983, p. 3).

<sup>2</sup> The *Matsya Purana* is one of the 18 *Maha Puranas*. According to Agrawala (1963, p. iii) the text can be dated to the 4<sup>th</sup> century but it was subject to insertions of additional matter from time to time.

<sup>3</sup> The *Pratima-mana-lakshana* is a text on iconometry available in Sanskrit and Tibetan manuscripts. The writer of the *Pratima-mana-lakshana* is Atreya. This text was edited and published for the first time by Phanindra Nath Bose (1929) and subsequently by Banerjea (1941) as an appendix to his book, *The Development of Hindu Iconography*. Bose (1929, p. iii) states that in many cases there are differences in the Sanskrit and Tibetan versions of this text, suggesting various readings. He (1929, pp. vii-viii) explains that this work was translated from Sanskrit into Tibetan between the 7<sup>th</sup> and 11<sup>th</sup> centuries and that the Sanskrit version must have been composed before the 7<sup>th</sup> century.

<sup>4</sup> The *Shilparatnakosha* is an Orissan text dated to 1620 on the construction of temples and iconography (Baumer and Das, 1994).

### The absolute and relative systems of measurement

In Indian art, measurement and proportion are indispensable for strength and beauty and measurement is considered the soul of all arts and crafts. An important authority on measurement is Vishvakarma (Figures 1 and 2) who, in the *Citralakshana* of Nagnajit, explains that measurements are applicable to *asuras*, *nagas*, *rakshasas*, *gandharvas*, *kinnaras*, *siddhas*, musicians and heralds, *pishacas*, *pretas*, *vidyadharas*, human beings and kings (NagCitLak III.528-539 in Goswamy and Dallapiccola 1976, pp. 79-80).

According to Haridas Mitra (1951, pp. 19-20) the Indian *vastu* and *shilpa shastras* recognise two standards of measurement: the absolute and the relative systems. In the absolute standard, the smallest unit of measurement is the almost microscopic particle of dust observable in the solar rays or atom. This measurement is named in different ways according to the texts, like for example *trasaremu*, *paramanu* or *chayamu* (shadow of an atom). Other measurements of the absolute system are the particle of dust called *raja* or *remu*, the tip of hair called *balagra*, *valagra* or *keshagra*, the nit called *liksha* or *likhya*, the louse or *yuka*, the barley corn or *yava* and the highest unit of this system is the digit or *angula* which corresponds to the width of the middle finger. They have a relation of one to eight as follows:<sup>5</sup>

8 *paramanus* make 1 *remu*<sup>6</sup>

8 *remus* make 1 *balagra*

8 *balagras* make 1 *liksha*

8 *likshas* make 1 *yuka*

8 *yukas* make 1 *yava*

8 *yavas* make 1 *angula*

<sup>5</sup> For these measurements see also Agrawala (1963, p. 355), Bhat (1981, p. 549), Marasinghe (1991, p. xxii) and Banerjea (1941, p. 394). Among the texts that explain the absolute system of measurement are the *Matsya Purana* (Agrawala, 1963), the *Brhat Samhita* (LVIII.1-2) and the *Citralakshana* of Nagnajit (III. 540-543).

<sup>6</sup> This measurement does not appear in all the texts. The *Matsya Purana* (Agrawala 1963, p. 355) and the *Citralakshana* of Nagnajit (III.540-543, in Goswamy and Dallapiccola 1976, p. 80) for example say that 8 atoms or *paramanus* make 1 tip of hair or *balagra*.

These measurements are found in the texts used in this study. However, Dagens (Baumer (ed.) 1992, p. 145) states that this system continues and allows to measure the size of everything with appropriate units, from the infinitesimal *paramanu* to the whole universe.

The relative standard, as explained by Haridas Mitra (1951, pp. 19-20), is constituted by the working measurements for making images in sculpture or painting. They include the measurements used in the *citrasutras* to explain the proportions of images. In this system the *tala*<sup>7</sup> measurement is the most frequently used, together with the *angula*. Banerjea (1941, p. 355) states that there are various synonyms of the word *tala* - they are *vitasti*, *mukha*, *yama*, *arka*, *rashi* and *jagati* - however in the texts used in this chapter the terms *tala* and *mukha* are more frequently used. The measurements of *tala* or palm and *mukha* or face are represented in figures 6 and 7. Other measurements are the *golaka* called also *gola* or *kala*, the *mushti*, the *bhaga* and the *hasta* or cubit.<sup>8</sup> In this system, the barley corn or *yava* measurement is also used as a working unit for fractions of an *angula*. The relationship between these measurements is as follows:

- 8 *yavas* make 1 *angula*
- 2 *angulas* make 1 *golaka* or *kala*
- 2 *golakas* or *kalas* (4 *angulas*) make 1 *bhaga*
- 4 *angulas* make 1 *mushti*
- 3 *bhagas* (12 *angulas*) make 1 *tala* or *mukha*
- 24 *angulas* make 1 *hasta*

The *Vishnudharmottara* mentions *tala* and *angula* as the two basic units of measurement. But not all the early texts use the word *tala*, in the *Brhat Samhita* and *Citralakshana* of Nagnajit, for example, the term *tala* was not employed but what is important is that the concept of a palm length as module for computing parts of the body was implicit (Dave 1991, pp. 349, 362).

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<sup>7</sup> The *tala* measurement delineates the *talamana* or *tala* system which will be explained in the next chapter.

### The digit or *angula* measurement

A few more words need to be said about the *angula* which is the basic unit prescribed to calculate the measurements of men and gods. Banerjea (1941, p. 346) explains that the term *angula* served as a unit of measurement in India from very early times. The term is used in the *Rg Veda* (X.90), in the *Shatapata Brahmana* (X.2.1-2) in which Prajapati measures the fire altar by *angulas*, and in the *Shulbasutras* which contain the rules for construction of raised altars (*vedis* and *agnis*). Dave (1991, p. 349) states that according to the *Kapinjala Samhita* (10.58-60) an *angula* is classified into three types: 1) *manangula*, 2) *matrangula* and 3) *dehangula*.

*Manangula* is a unit comprising 8 barley grains or *yavas*. This measurement corresponds to the breadth (not to the length) of the middle phalanx of one's middle finger. This "personal" unit multiplied by twelve would correspond to the length of our palm of the hand. It is also suggested that this unit will work very well as a mental measurement while reading the texts on proportion. It is believed that the use of a "personal" *angula* is the most appropriate way by which to read the texts and by keeping it in mind one will also be able to measure for oneself the suggested dimensions.

The *Matrangula* is determined by the length of the middle phalanx of the patron's right hand and is employed for the construction of images or sacrificial altars. According to Marasinghe (1991, p. xxiii) the *matrangula* is that kind of linear measure taken to be the length of the middle link of the middle finger of the artisan or of the patron that directs a monastery to be built or an image to be installed. This means that this measurement is a fixed unit and is considered auspicious and should be determined before the realisation of any work.

*Dehangula* is the *angula* of the image itself (Banerjea 1941, p. 349) which means that it is derived from the total height of the image to be fashioned. *Dehangula* is one of the various names of this unit, other names are *dehalabdangula*, *verangula*, *bimbangula*, *svenangula* (especially in *Vishnudharmottara* III.35.9b), *svakiyangula* and

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<sup>8</sup> For these measurements see also Marasinghe (1991, p. xxiii), Vinaysagar (1999, pp. 52-53)

*svangula*. The *dehangula* is used for the construction of images and is essentially a relative unit given that it is the height of an image which determines the length of the *dehangula*. The height of an image depends upon the given dimension of the material and the number of *angulas* and *talas* (see chapter 4) in which the image is to be fashioned (see also Dave 1991, pp. 350-351).<sup>9</sup> Bhatt (1981, p. 550) states that Utpala (10<sup>th</sup> century), who commented on Varahamihira's works, explains the *dehangula* as follows: "divide the total length of the stone or wooden piece, which will cover the entire height of the idol from head to foot, into 108 equal parts. One of the parts would then be its own *angula* or digit." Utpala, however, did not take into consideration that there are images having a different length from the one prescribed in the *Brhat Samhita* of 108 *angulas*. For example, an image built according to the *sapta tala* measurement consists of 84 units or *dehangulas* and the *ashta tala* measurement is 96 units. In these cases, one should divide the length of the face into 12 parts or *angulas* to calculate the *dehangula* of the image.

### The six types of measurement

According to the *citrasutras*, there are six types of measurement (*mana*) to be taken along the body of an image. Rao (1920, p. 39) enumerates these measurements as follows:

- 1) *mana* or measurement of the length of the body (*dirgha*);
- 2) *pramana* or measurement of its breadth (*vistara*);
- 3) *unmana* or measurement of thickness;
- 4) *parimana* or measurement of girth;
- 5) *upamana* or measurement of inter-spaces;
- 6) *lambamana* or measurement taken along the plumb-lines or *sutras*.

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and Banerjea (1941, pp. 394).

<sup>9</sup> Marasinghe (1991, pp. xxi-xxii) mentions other criteria to be adopted in determining the height of an image. They are for example the measurement proportionate to that of the temple, the height of the base of the temple, the door of the temple or the *garbha grha*.

*Mana* refers to the vertical measurements such as the distance from the hair-limit to the eye-line, from that point to the tip of the nose, the length of the arms and of the legs and so on. *Pramana* is the horizontal measurement or breadth, such as the distance between the two shoulders, the width of the body at the chest level, the width of the belly or the width of the arm or of the thigh. *Unmana* is the measurement of the elevation or thickness, such as the height of the breasts or of the nose. *Parimana* is for instance the girth of the arm or of the thigh. *Upamana* is the measurement of the inter-spaces, i.e. the width of the navel, the interval between the two thighs or the two big toes. These kinds of measurements, together with the *lambamana* measurement explained in the next chapter, constitute the six kinds of iconometric measurement as applied to standing, seated and reclining images (see also Marasinghe, 1994, p. xiv). However it is difficult to find a text that uses all six of them. The *Shivatattva Ratnakara*<sup>10</sup> enumerates only three types: *dairghyam* (length), *vistam* (breadth) and *sthaulyam* (depth) (Krishnamurthi 1995, p. 177). The *Shilparatna* explains the *lambamana*, and in the *Vishnudharmottara* and the *Citralakshana* of Nagnajit all the measurements except the *lambamana* are employed.

### **The five types of men or *panca-purusha***

The *Vishnudharmottara*, the *Citralakshana* of Nagnajit and the *Samarangana Sutradhara* explain the theory of proportion taking as examples five stereotypes of men or *panca-purusha*. More properly these *citrasutras* explain very carefully the most important stereotype called *hamsa* or *cakravartin*, and from him we are invited to derive or calculate the proportions of the other four types. The *Citralakshana* of Nagnajit (Goswamy and Dallapiccola 1976, p. 107) clearly states that following the method of measurement of the *cakravartin*, diminution should be introduced for other classes of people. The names of the five types of men are *hamsa*, *bhadra*, *malavya*, *rucaka* and *shashaka* or *shasha* (ViDha III.36 and SamSut 81). The *Citralakshana* of Nagnajit gives

<sup>10</sup> See note 16 in chapter 2.



different names for them, they are: *cakravartin*, *sadhu*, *malava*, *vyanjana* and *giridhara* (NagCitLak III.1077-1141).

The *Vishnudharmottara*, *Citralakshana* of Nagnajit and *Samarangana Sutradhara* list the measurements of length of the five men in *angulas*. The *Vishnudharmottara* states that the height of the *hamsa* type is 108 *angulas* according to the measurement of his own finger, *bhadra* is 106 *angulas*, *malavya* is 104 *angulas*, *rucaka* is 100 *angulas* and *shashaka* is 90 *angulas* (ViDha III.35.9-11 in Sivaramamurti 1978, p. 167 and Dave 1991, p. 68). The *Citralakshana* of Nagnajit differs in the measurement of the *giridhara* or *shashaka* type which is 98 *angulas* instead of 90 (NagCitLak III.556-573, see Goswamy and Dallapiccola 1976, pp. 80-82), while the *Samarangana Sutradhara* is different in the measurement of the *hamsa* type which is 88 *angulas* instead of 108 (SamSut 81.3a). Their height measurement can be summarised as follows:

**Table II**  
**Height of the *panca-purushas***

Texts	<i>hamsa</i>	<i>bhadra</i>	<i>malavya</i>	<i>rucaka</i>	<i>shashaka</i>
ViDha	108	106	104	100	90
NagCitLak	108	106	104	100	98
SamSut	88	106	104	100	90

Dave (1991, pp. 339-340) states that the earliest mention of the *panca-purusha* can be traced back to the astrological texts and that the sources specific to the five men found in the *Vishnudharmottara* and *Citralakshana* of Nagnajit are evidently the *Brhat Samhita* and the *Saravali* of Kalyanavarman. Both astrological texts have a chapter entitled *panca-maha-purusha-lakshana* or 'the characteristics of the five great men' containing a detailed and concise description of the five men. The context in which the five men appear in the *Brhat Samhita* (BrSam 68-69) and *Saravali* (37) is vastly different from that of the *Vishnudharmottara* and the *Citralakshana* of Nagnajit. Each of these five personages, according to these astrological texts were said to be born due to the predominance of a particular planet. In the *Vishnudharmottara* and the

*Citralakshana* of Nagnajit however, the five men play the role of an artistic stereotype for portraying kings, gods, demons and so on.

Dave (1991, p. 344) explains the relevance of the astrological texts arguing that the ancient art theorists found in the personification of planets and the traits that astrologers associated with individuals born under the influence of a particular planet, a starting point for constructing the various artistic types. Therefore it seems reasonable to interpret the relevant sections describing the five types of men in the *Vishnudharmottara* against the background provided by the *Brhat Samhita* and *Saravali*. Seen against this broader framework, it will become possible to distinguish between the conventions which have a predominantly physiognomic intent and those imbibing a more artistic value. It will appear that many of the prescriptions stated in the *citrasutras* are more meaningful within a physiognomic context and appear less concerned with the practice of art.

Chapter 68 of the *Brhat Samhita* entitled *purusha-lakshana* is also relevant for our analysis here because it explains the characteristics of kings and men. These characteristics are not concerned with measurements or proportion but with physiognomy. The importance of this chapter is due to the fact that many of the characteristics explained in it are mentioned in the *Citralakshana* of Nagnajit and the *Vishnudharmottara*. Chapter 68 of the *Brhat Samhita* can therefore help us to read the two *citrasutras* properly. In particular, this chapter analyses different features of men and kings such as the characteristics of the body, complexion, voice, strength, joints, gloss, colour, physiognomy, height, weight, natural character and gait.

The *Brhat Samhita* and *Saravali* describe the astrological origin of the five men in chapter 69 and 37 respectively. Both texts state that when the five non-luminaries, Mars, Mercury, Jupiter, Venus and Saturn, possessed of strength, occupy their own houses or exaltation signs, identical with *kendras* (1<sup>st</sup>, 4<sup>th</sup>, 7<sup>th</sup> and 10<sup>th</sup> houses), five illustrious personages are born. The five exalted men who come into existence are called in order *hamsa*, *shasha* (*shashaka*), *rucaka*, *bhadra* and *malavya* (BrSam 69.1-2 in Bhat 1981, p. 646 and *Saravali* 37.1-2 in Santhanam 1983, p. 645). The influence of the planets gives to the five men different characteristics that can be seen in their descriptions.

The *Vishnudharmottara* describes the *hamsa* type as one who has honey-red coloured eyes, is fair like the moon, has arms which resemble the elephant's trunk and is swan-like in gait. He has a beautiful slender waist and is strong and handsome (ViDha 36.2, Sivaramamurti 1978, p. 170 and Dave 1991, p. 90). Similarly, the *Brhat Samhita* and *Saravali* describe the *hamsa* type as one who has a reddish face with fleshy cheeks, raised nose, golden hue and round head. His eyes are like honey in colour and his nails are reddish. On palms and soles he has the marks of a garland, conch, fish, pot, lotus, trident and arrow. His voice is as sweet as that of a swan, he has beautiful feet and clean limbs. He has virile power coming under Jupiter and is fond of sporting in water (BrSam 69.24 in Bhat 1981, pp. 664-665 and *Saravali* 37.11-13 in Santhanam 1983, p. 648). Figures 8 and 9 show an attempt to represent the *hamsa* type of man. In figure 8 Dave Mukherji (2001) seems more concerned with measurement, while in figure 9 Chatterjee Sastri (1971) seeks to capture the physical features of the *hamsa* type. Both illustrations show how it is difficult to represent this type according to the injunctions, and clearly demonstrate that drawing a figure from a description in a book is a matter of personal interpretation.

According to the *Vishnudharmottara*, a *bhadra* type (Figure 10) is bushy on his cheeks, his gait is like that of an elephant and he is noble minded. He has rounded and heavy arms and his hands and feet resemble a lotus (ViDha 36.3 in Sivaramamurti 1978, p. 170 and Dave 1991, p.90). Similarly, the *Brhat Samhita* states that one who belongs to the *bhadra* type, influenced by Mercury, possesses developed, equal, round and long arms, a height equal to the length of his outstretched arms and temples densely covered with tender and fine hair (BrSam 69.13 in Bhat 1981, p. 651). The *Saravali* adds that his face is like a tiger and he has broad chest, long strong hands and a square body. He is sensuous, valorous, learned, endowed with prowess and is conversant with *yoga*. His palms and soles have the symbols of conch, sword, elephant, arrow, wheel, lotus and plough. His body emanates a smell akin to earth settled with fresh drizzle and sandal paste. He knows the *shastras* and is independent in all his undertakings. He has well-knitted eyebrows and black short hair (*Saravali* 37.14-18 in Santhanam 1983, p. 648-649).

The *Vishnudharmottara* explains that a *malavya* type (Figure 11) is dark like the green pulse, he has slender waist, beautiful body with long arms reaching the knees, broad shoulders, prominent nose like an elephant's trunk and large jaws (ViDha 36.4 in Sivaramamurti 1978, p. 170 and Dave 1991, p. 90). The *Brhat Samhita* states that a person belonging to the *malavya* type, influenced by Venus, possess arms that are long like the elephant's trunk, hands that touch the knees, limbs and joints full of flesh, an even body, attractive and slender waist. His face is 13 digits long and his ear holes are 10 digits apart. He has shining eyes, fine cheeks, equal and white teeth and not a very fleshy lower lip (BrSam 69.10 in Bhat 1981, p. 650). The *Saravali* adds that the *malavya* type has an even physique, thin waist, splendour equal to that of the moon, majestic voice, pleasant odour of the body, piercing sight, even and white teeth (*Saravali* 37.3-4 in Santhanam 1983, p. 646).

As the *Vishnudharmottara* says, a *rucaka* type (Figure 12) is reddish-brown like the autumn, he has a conch-like neck and is highly intelligent, courageous, laborious, strong, and endowed with great taste (ViDha 36.5 in Sivaramamurti 1978, p. 170 and Dave 1991, p. 90). The *Brhat Samhita* explains that a person belonging to the *rucaka* type, influenced by Mars, has fine brows and hair, dark and red complexion, conch-like neck and an oblong face. He is heroic, cruel, a leader among men, a minister, the leader of a gang of thieves and hard working (BrSam 69.27 in Bhat 1981, p. 655). The *Saravali* adds that he has attractive eyebrows, blue hair, he knows the *mantras*, he has thin shanks and the marks of a staff (*khatvanga*), cord, bull, arrow, diamond and lute on hands and legs (*Saravali* 37.5-7 in Santhanam 1983, pp. 646-647).

According to the *Vishnudharmottara*, a *shashaka* type (Figure 13) is dark red or reddish brown in complexion, he has slightly protruding teeth, full cheeks, large eyelids and is clever (ViDha 36.6 in Sivaramamurti 1978, p. 170 and Dave 1991, p. 90). The *Brhat Samhita* explains that a person belonging to the *shashaka* class, influenced by Saturn, has slightly raised and small teeth, thin nails, large pupils, brisk gait and plump cheeks. He is attached to learning pertaining to minerals and metals and is engaged in trade. He is a leader of armies, fond of sexual pleasures, addicted to others' wives, fickle-minded, heroic, devoted to his mother, and a lover of forests, mountains, rivers and fortresses (BrSam 69.20 in Bhat 1981, p. 653). The *Saravali* adds that a *shashaka*

type has a small face, weak loins, long body, eyes resembling the lotus, hands with the marks of conch, wheel, garland, lute etc. (*Saravali* 37.8-10 in Santhanam 1983, p. 647).

Many of the characteristics mentioned in the chapters on physiognomy of the *Brhat Samhita* and *Saravali* like the gait like an elephant or swan, or details of the voice, seem to have little relevance in the practice of painting or sculpture, but in fact they play an important role in texts like the *Vishnudharmottara* and the *Citralakshana* of Nagnajit. These two texts include physiognomic characteristics in their iconometric sections described in the following paragraphs.

### The system of proportion

The theory of proportion explained in the *citrasutras* is characterised by the use of stereotypes. These are for example the *hamsa* type for the *Vishnudharmottara* and the *cakravartin* for the *Citralakshana* of Nagnajit who both share the same height of 108 *angulas*. The *Brhat Samhita* has a chapter on measurements which takes a single generalised idol whose prescribed length is 108 *angulas* (BrSam 58 in Bhat 1981). The same goes for the *Matsya Purana* (ch. 258 in Agrawala 1963, p. 356) and *Pratima-mana-lakshana* (Banerjea, 1941). Therefore, the height of 108 *angulas* should be considered as a standard measurement and as the starting point to learn the very complex theory of proportion. This measurement corresponds to the *nava tala* and is represented in figure 14.

The measurements of length of an image of 108 *angulas* can be summarised, according to the *Matsya Purana*, as follows (see Agrawala 1963, p. 356):

*Mukha* or face is 12 *angulas*

*Griva* or neck is 4 *angulas*

*Hrdaya* from neck to heart is 12 *angulas*

From heart to navel is 12 *angulas*

*Nabhi* or navel is 1 *angula*

*Medhramula* from navel to genitals is 12 *angulas*

*Uru* or thigh from pubis to knee is 24 *angulas*

*Januni* or knee-cap is 4 *angulas*

*Jangha* from knee to ankle is 24 *angulas*

*Pada* or foot is 4 *angulas*

Total height is 108 *angulas*.

The measurements of height delineated above provide the base to learn the more complex *tala-mana* system (chapter 4). The next paragraphs analyse in detail the measurements of the body as explained in the various texts trying to highlight their differences. The proportions of the body of a man of 108 *angulas* in height, be he a *hamsa* type, a *cakravartin* or an image, are explained in the *citrasutras* using different ways of measurement such as the girth, width, height and depth. The measurements that follow are taken from texts like the *Vishnudharmottara*, *Citralakshana* of Nagnajit, *Brhat Samhita*, *Pratima-mana-lakshana* and, to some extent, the *Shilparatnakosha*.

### **Proportions and characteristics of the face**

According to the *Citralakshana* of Nagnajit, the face should be divided into three parts, forehead, nose and chin, each of which should measure four digits. The width of the face is 14 digits and its length is 12 digits. The cranial protuberance (*ushnisha*) amounts to 4 digits in length and 6 digits in width (NagCitLak III.619-656 in Goswamy and Dallapiccola 1976, p. 82). The *Vishnudharmottara* (ViDha III.35-36), *Brhat Samhita* and *Pratima-mana-lakshana* have the same measurements. The *Brhat Samhita* adds that the line of hair should be made equal to the brows, i.e. 10 digits, and half a digit thick (BrSam 58.13 in Bhat 1981, p. 551).

The *Brhat Samhita* explains that the circumference of the head is 32 digits and its width is 14 digits. In painting (*citrakarma*), however, only 12 digits of the head are visible and the remaining 20 are not visible.<sup>11</sup> The face and hair put together should

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<sup>11</sup> This passage is very interesting because it shows how the arts of sculpture and painting overlap and that their theories rely on the same texts. Although the verse explains

measure 16 digits in length (BrSam 58.14-15 in Bhat 1981, pp. 551-552). According to the *Pratima-mana-lakshana* the head should be shaped as an umbrella (v. 12 in Banerjea 1941, p. 12). The head like an umbrella is one of the signs of a king according to the chapter on physiognomy of the *Brhat Samhita* (BrSam 68.79 in Bhat 1981, p. 628).

The *Citralakshana* of Nagnajit states that the face of gods and kings should be made squarish in form, sharply delineated, full and endowed with brilliant and pleasing marks. It should not be triangular, sloping, angry or round. For common persons the face should be desirous of composure (NagCitLak III.693-704 in Goswamy and Dallapiccola 1976, pp. 85-86).

The *Pratima-mana-lakshana* explains that, generally, the face is a *tala* (12 *angulas*) in length, but it may also have different shapes and measures (Figure 15). There is the face shaped like a “*va*” letter which is less in length by 1 ½ *angulas*, the face shaped like a mango which is less by 2 *angulas*, the one shaped like the egg of a bird which is less by 2 ½ *angulas*, and the one like the sesame seed which is less by 3 *angulas* (vv. 7-9 in Banerjea 1941, p. 394). The text adds that the face of female figures should be of the sesame seed variety only (v. 10 in Banerjea, 1941, p. 395). According to the *Pratima-mana-lakshana*, auspicious types of faces are a little smiling and endowed with all good signs. There is no place for faces which are malicious, passionate, wrathful, sour, bitter or circular (vv. 35-36 in Bose 1929, p. 15 and Banerjea 1941, p. 400).

The *Vishnudharmottara* says that the face should be regular, fleshy, benevolent, with auspicious characteristics, neither triangular nor crooked. In the case of gods, the *Vishnudharmottara* strongly rules out oval (*dirgha*), round (*mandala*), triangular (*trikona*) and deformed (*vakra*) faces (Figure 16) (ViDha 38.4-5 in Dave Mukherji 2001, pp. 58-59).

Also the *pratimalakshana* section of the *Shilparatnakosha* (vv. 24b-26a in Baumer and Das 1994) has a classification of faces. They are three in number according

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circumference, which would be useful only in sculpture, the writer gives instructions on how the same head would appear in painting.

to their mood. The face like a banyan leaf is peaceful, the face like a *pippala* leaf bestows a meditative mood, and the round face is fierce. The text (v. 27) clarifies that in a banyan leaf face the nose should be long, and in a *pippala* leaf face the nose should be sharp.

According to the *Pratima-mana-lakshana*, the space between the line of the eyebrow and eye is one *golaka* (2 *angulas*). The space between the chin and the root of the ear is 8 *angulas*. Then the chin and the forehead are parallel to the eyes, and the sides of the mouth should be measured in the same line with the side of the pupil; the line of the eyebrow and the *karnasutra*<sup>12</sup> should also fall in the same line (vv. 27-30 in Banerjea, 1941, p. 398-399).

The *Vishnudharmottara* and *Citralakshana* prescribe that the width of the ear is 2 digits and its length is 4 digits. The opening of the ear is half a digit in width and 1 digit in length. There are no definite instructions for the ear-lobes (NagCitLak III.619-656 in Goswamy and Dallapiccola 1976, p. 82 and ViDha 36.I.3-4 in Sivaramamurti 1978, pp. 169-170 and Dave Mukherji 2001, pp. 18-19).

The *Brhat Samhita* explains that the tip of the ear should be 4 ½ digits further off the corner of the eye on a level with the brows. The ear-holes and the raised margin near them (*pippali*) should lie at the same level as the corner of the eye and measure one digit. The distance between the corner of the eye and the ear should be 4 digits (BrSam 58.7-8 in Bhat 1981, p. 551).

According to the *Brhat Samhita*, the brows measure ten digits from end to end, the line of brows is ½ a digit in width, the interval between the brows is two digits, and the length of each brow is four digits (BrSam 58.12 in Bhat 1981, p. 552). The *Pratima-mana-lakshana* gives different measurements saying that a space of half an *angula* should be between the two eyebrows, their length should be 5 *angulas* each and the

<sup>12</sup> *Karnasutra* means the line of the ear. The explanation of the measurement of face in the *Pratima-mana-lakshana* relies on the use of lines or *sutras* that are crossing the face. In this text *karnasutra* is mentioned explicitly, but there are two other lines that are mentioned implicitly, they are *bhrusutra* or line of the eyebrow and *akshisutra* or line of the eye (see also Banerjea 1941, p. 339). *Karnasutra* in this text appears to be an horizontal line, however, in the *Bimbamana* (v. 80 in Marasinghe 1994, p. 27) the *karnasutra* is a vertical line which passes through the outer edge of the ear and of the breast, the thigh and the shank, the outer edge of the of the ankle and by the side of the fourth toe.



unbroken bow shaped line of the eyebrow should measure  $\frac{1}{2}$  *yava* in width (vv. 20-23 in Banerjea 1941, p. 397).

The *Citralakshana* of Nagnajit not only gives different measurements but its version focuses more on the characteristics and shapes of the brows. This text elucidates that the length of the brows amounts to 4 digits and their width is 2 barley grains or *yavas*. In the case of benign beings, the brows are like the crescent moon. The brows of the dancers, the angry-ones and the crying-ones are bent like a bow. In the case of terrified and grief-stricken people, whose head is raised at the back and lower portion, the brows appear as if coming out of the nostrils and cover half of the forehead. The brow locks (*urna*) of the *cakravartin*, which are placed between the brows, should be made of the size of one digit. The space from the middle of the brows to the hair line amounts in width to 2 and a half digits. From the starting point of the brows to the expanse of the forehead there are four digits (NagCitLak III.574-618 in Goswamy and Dallapiccola 1976, pp. 82-83).

The *Citralakshana* of Nagnajit explains that eye sockets are two digits long and so is the space between the eyes. Their width is 1 digit. The pupils are one third of the eye and the eyes should be made in proper relationship to the length of the face (NagCitLak III.574-618 in Goswamy and Dallapiccola 1976, p. 83). The *Brhat Samhita* states the same measurements of eyes adding that the innermost circle of the pupil is  $\frac{2}{5}$  of a digit, and that the space between the eyes is 4 digits and not 2 (BrSam 58.10-11 in Bhat 1981, p. 551). The *Pratima-mana-lakshana* has different measurements for the eyes which should be 2 *angulas* and 2 *yavas* in length (vv. 20-23 in Banerjea 1941, p. 397). The *Vishnudharmottara* also prescribes different measurements for the eyes and says that they are an *angula* in width and 3 *angulas* long. The dark pupil is a third part of the eye while the central part of the pupil is one fifth of the eye (ViDha 36.II.3-4 in Dave Mukherji 2001, pp. 20-21).

The *Vishnudharmottara* and the *Citralakshana* of Nagnajit enjoin that the eyes may have different shapes. They could be bow-shaped or *capakrti* (Figure 17), belly-fish like or *matsyodarakrti* (Figure 18), like the petal of the blue lotus or *utpala-*

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*patrabha* (Figure 19), like the petal of the lotus or *padmapatranibha* (Figure 20), like the cowrie shell or *shankhakrti* or *panakrti* (Figure 21). The width of the eyes which resemble a bow is three barley grains or *yavas* ( $\frac{3}{8}$  of an *angula*). The eyes resembling an *utpala* petal or blue lotus are six barley grains. The eyes resembling the belly of a fish measure 8 *yavas* (1 digit). Eyes resembling the petal of a *padma* lotus or white lotus have a measure of 9 *yavas*. Eyes that are similar to a cowrie shell amount to 10 *yavas* (ViDha 37.9-12 in Sivaramamurti 1978, p. 172 and Dave 1991, p. 114; NagCitLak III.619-656 in Goswamy and Dallapiccola 1976, p. 83). Both texts add that in the case of *yogis*, eyes should be made to resemble a bow. In the case of women and lovers, eyes should be made resembling the belly of a fish. In the case of ordinary persons, eyes should be made like the petal of an *utpala* lotus. Eyes resembling an *utpala* petal are red at the corners, the pupils are black and shiny, the lashes have long points and are pleasing with the lustre of their colour appearing in soft tones. Eyes resembling the petal of a *padma* lotus should be used to express fright and crying. The eyes of those troubled by anger and grief should be painted resembling a cowrie shell. (ViDha 37.13-15 and 38.1 in Sivaramamurti 1978, pp. 172-173 and Dave 1991, pp. 30, 114, 130; NagCitLak III.619-656 in Goswamy and Dallapiccola 1976, p. 84). The *Citralakshana* explains that eyes of gods are lustrous and rich like the colour of the cow's milk, having lashes and constantly changing in their play of colours, with black and large pupils (NagCitLak III.619-656 in Goswamy and Dallapiccola 1976, p. 84).

The *pratimalakshana* section of the *Shilparatnakosha* (vv. 22-24a in Baumer and Das 1994) has a similar classification of eyes. The types of eyes are four in number according to their expressions. The eye like a lotus is peaceful in character, the eye like a wagtail bird is sharp, the eye like a fish is enchanting and the eye like a bud is full of wonder.

The *Citralakshana* of Nagnajit states that the nose is 4 digits long and its tip is 2 digits in height and width. The width of the nostrils is 6 barley grains and their height is two barley grains. The space between the nostrils measures two barley grains and six barley grains in length (NagCitLak III.657-664 in Goswamy and Dallapiccola 1976, p. 84). The *Brhat Samhita* and *Vishnudharmottara* add that the sides of the nose should measure two digits and that the front part of the nose should be two digits in height and

breadth (BrSam 58.10 in Bhat 1981, p. 551; ViDha 36.I.5-6 in Dave Mukherji 2001, pp. 18-19).

The *Citralakshana* and *Vishnudharmottara* state that the upper lip has the thickness of one digit, and the lower lip has the thickness of half a digit. The length of the upper lip and the lower lip measures 4 digits. The part lying above the upper lip (*goji*) has an expanse of half a digit. The edges of the lips are red as the *bimba* fruit and they resemble in their form the crest of a bow. The corners of the mouth are turned slightly up to create an expression of a lovely smile (NagCitLak III.665-674 in Goswamy and Dallapiccola 1976, p. 85 and ViDha 36.II.1 in Dave Mukherji 2001, pp. 20-21). The *Brhat Samhita* gives the same measurements adding that the mouth should be four digits long and 1 ½ digits broad, when closed, and three digits when open (BrSam 58.8-9 in Bhat 1981, p. 551). The chin has a height of 2 digits and a width of 3 digits. The cheeks should be made to the measurement of 5 digits, the jaw bones to that of 4 digits and the measurements of the contour of the cheeks amount to 4 digits (NagCitLak III.675-692 in Goswamy and Dallapiccola 1976, p. 85; ViDha 36.I.3 and 36.II.2 in Dave Mukherji 2001, pp. 18-21).

The *Citralakshana* of Nagnajit explains that teeth are even-shaped, thickly set, shining, pure, sharp and white. They should be 40 in number.<sup>13</sup> The canines are 3 barley grains in length and in breadth they are 2 *yavas*. The gums, the palate and the contour of the tongue should be made red (NagCitLak III.933-947 in Goswamy and Dallapiccola 1976, p. 97). The *Vishnudharmottara* states that the height of the teeth is half an *angula*, the canine teeth are one and a half *angulas* (ViDha 36.II.2-3 in Dave Mukherji 2001, pp. 20-21).

According to the *Citralakshana* of Nagnajit, the tongue resembles the lotus petal, glimmers like lambent lightning and is similar to the young leaf of the *adha* plant

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<sup>13</sup> Dave changes the number of teeth bringing it to the normal 32, as Sivaramamurti has done in his translation (1978, p. 169). Dave (1991, p. 96) justifies her change saying that: "Since the iconometry in this text is based on human scale and proportion, 40 teeth seem most unlikely. If there were any other superhuman features stated, then perhaps one might entertain the reading." This number of teeth, however, is not only stated in the *Vishnudharmottara* (ViDha III.36) but also in the *Citralakshana* of Nagnajit and, in spite of this improbable feature, the translation should be kept as it is formulated by the original texts.

(*Gratiola monniera*). The sound of the voice<sup>14</sup> is harmonious, resembling that of the mighty elephant. The tone is emitted as if by the king of the horses and is projected like the sound of thunder (NagCitLak III.948-956 in Goswamy and Dallapiccola 1976, pp. 97-98).

The *Citralakshana* of Nagnajit and the *Vishnudharmottara* describe that the hair is fine, resembling a spiral figure, shimmering with its natural rich shine, and falling down to the shoulders in locks and spiralling to the right. The spirals resemble the mane of the lion and the bun on the head (*shikhabandha*) spirals leftwards (NagCitLak III.957-968 in Goswamy and Dallapiccola, p. 98; ViDha 37.7 in Sivaramamurti 1978, p. 171 and Dave 1991, p. 114). The *Vishnudharmottara* adds that there are different varieties of hair: *kuntala* or locks, *dakshinavarta* or curling to the right, *taranga* or wavy, *simhakeshara* or like the lion's mane, *barbara* or curly, *jutaka* or twisted and *sata* or matted (ViDha 37.8 in Sivaramamurti 1978, p. 172 and Dave 1991, p. 114). According to the *Pratima-mana-lakshana* the hair on the head should be matted or curled, or there should be a tiara (*kirita*), a diadem (*trishikha*) or a crown (*mukuta*). They should not be longer than 8 *angulas* (vv. 33-34 in Bose 1929, pp. 14-15 and Banerjea 1941, p. 399).

The *Citralakshana* of Nagnajit explains that the neck should be 4 digits in length and 21 in girth. In the case of those who are slim, the neck is 8 digits long, and in the case of heavy ones it is 1/3 of it. The neck can be made beautiful adding three folds of skin and in that case the neck resemble the form of a conch shell.<sup>15</sup> The neck at the back should not be low and should be made to look round in its circumference (NagCitLak III.675-686 in Goswamy and Dallapiccola 1976, p. 85).

<sup>14</sup> The sound of the voice can have a meaning only within the physiognomic context. Voice is in fact one of the characteristics from which it is possible to predict the future of a man (see BrSam 68).

<sup>15</sup> The neck resembling a conch is one of the characteristics found in the texts on physiognomy. The *Citralakshana* of Nagnajit reveals the meaning of this expression explaining that the conch like neck is a neck with three lines or three folds of skin on it.

### Proportions and characteristics of the body

The *Brhat Samhita* states that the distance between the lower part of the neck and the heart is 12 digits and the same is between the heart and the navel. The distance between the navel and the genitals is also 12 digits (BrSam 58.15 in Bhat 1981, p. 552). The *Brhat Samhita* and the *Vishnudharmottara* prescribe that the distance between the nipples is 16 *angulas*, and that the distance between the clavicle and the nipple is 6 *angulas* (ViDha 36.III.2 in Dave Mukherji 2001, pp. 22-23; BrSam 58.24 in Bhat 1981, p. 554).

The *Pratima-mana-lakshana* explains that from the jugular (*hikka*, lit. hiccup) to either of the nipples is one *tala*. The space between the two nipples and that from the side of the neck to the top of the arm are all one *tala*. The portion between the navel and either of the two nipples is 14 *angulas*. The base of the neck and the top of the shoulders should be placed in the same line and the space between the two shoulders is 3 *talas* (vv. 36-39 in Banerjea 1941, p. 400).

The *Brhat Samhita* states that the upper arms and forearms should measure 12 digits each in length, and 6 digits and 4 digits respectively in breadth. The circumference of the arms at the armpit is 16 digits, and at the wrist 12 digits (BrSam 58.25-26 in Bhat 1981, p. 554). The *Pratima-mana-lakshana* explains that the length of the arm is 4 *talas* (48 *angulas*) (vv. 43-45 in Banerjea 1941, p. 401). The root, middle and front sections of the arm are 8, 6 and 4 *angulas* in breadth respectively, while their respective girths should be three times the measurement of their width<sup>16</sup> (vv. 59-62 in Banerjea 1941, p. 404). The *Vishnudharmottara* prescribes that the girth of the arm near the shoulder is 16 *angulas* and at the forearm is 12 (ViDha 36.III.2 in Dave Mukherji 2001, pp. 22-23). According to the *Citralakshana* of Nagnajit, the measurement of the whole arm is given as 36 digits, out of which 18 *angulas* comprise the upper arm, and the same number the lower arm. The upper arm has a breadth of 5 digits, the elbow is of 3 digits and the lower arm is 4 digits. The arms including the hands should in their whole length, measure 48 digits so that they reach to the knees. They are very long and

<sup>16</sup> According to the *Pratima-mana-lakshana* the girth of a limb is always three times its width (see also vv. 66-68 in Banerjea 1941, p. 404). The same injunction is given in the *Bimbamana*

swollen with muscles, they should be made symmetrical and handsome. Moreover, the arms of the *cakravartin* are symmetrical as the tail of a bull. When he stands erect, both the hands touch the knees and for this reason the hands of a king are defined as 'reaching up to the knee' or *janudaghna* (NagCitLak III.867-894 in Goswamy and Dallapiccola 1976, pp. 93-94).

The *Brhat Samhita* explains that the armpits are to be at a height of 6 digits (BrSam 58.24 in Bhat 1981, p. 554). The *Pratima-mana-lakshana* states the same measurement adding that the space between the armpit and the nipples should also be 6 *angulas* (vv. 40-41 in Banerjea 1941, p. 400).

The *Citralakshana* of Nagnajit maintains that the breasts should be divided into two surfaces. The part between the collar bones up to the breasts is an even surface but not that from the breasts to the navel cavity. From the navel to the genitals the surface is even. The loins amount to 14 digits in length. The nipples measure one *yava* in height and 2 digits in circumference (NagCitLak III.705-734 in Goswamy and Dallapiccola 1976, pp. 86-88). The text adds that in the case of those who wear a lower garment and have a girdle tied around it, the part of the belly below the navel should measure 4 *angulas* (NagCitLak III.705-734 in Goswamy and Dallapiccola 1976, pp. 86-88).

The *Pratima-mana-lakshana* states that the navel is deep and should be characterised by the *dakshinavarta* sign (curvature of the navel from left to right) (vv. 40-41 in Banerjea 1941, p. 401). The *Brhat Samhita* and *Vishnudharmottara* maintain that the navel is one digit both in depth and breadth (BrSam 58.23 in Bhat 1981, p. 554; ViDha 36.III.6 in Dave Mukherji 2001, pp. 22-23), whereas the *Citralakshana* explains that the navel is  $\frac{1}{2}$  *angula* in circumference, is deep and spirals towards the right (NagCitLak III.705-734 in Goswamy and Dallapiccola, p. 87).

The *Brhat Samhita* and the *Vishnudharmottara* maintain that the hips are 18 digits in breadth and 44 digits in circumference. The circumference of the waist at the centre of the navel is 42 digits (BrSam 58.24 in Bhat 1981, p. 554; ViDha 36.III.6 in Dave Mukherji 2001, pp. 22-23).

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(v. 71 in Marasinghe 1994, p. 25) which explains that three times the breadth of any particular part should be equal to the measurement of the girth.

According to the *Citralakshana* of Nagnajit, the penis is 2 digits broad and 6 digits long, and the scrotum is 6 digits long. The space between the penis and the edge of the belly should be 6 digits in measurement (NagCitLak III.705-734 in Goswamy and Dallapiccola 1976, pp. 86-88). The *Vishnudharmottara* says that testicles are 4 *angulas* in width and the penis is 6 *angulas* long. (ViDha 36.III.7-8 Dave Mukherji 2001, pp. 22-23).

The *Vishnudharmottara* explains that thighs measure 14 *angulas* in width in the middle and their circumference is twice as much. The knee is 8 *angulas* in breadth and three times that in girth. The lower end of the shanks is five *angulas* wide and 14 in girth (ViDha 36.III.7-8, 36.IV.1 in Dave Mukherji 2001, pp. 22-25). The *Brhat Samhita* adds that length of the thighs is to be 24 digits, the same is for the shanks. The kneecaps are 4 digits and the feet too are of the same height. The circumference of the shanks at the end is to be 14 digits, and their breadth five digits, but in the middle they are 7 digits in width and 21 digits in circumference. The width of the knee in the middle is 8 digits, its circumference 24 digits. The *Brhat Samhita* agrees with the *Vishnudharmottara* that the thighs are 14 digits broad in the middle and their circumference is 28 digits (BrSam 58.17,21-22 in Bhat 1981, pp. 553-554).

The *Citralakshana* of Nagnajit gives a different measurement of length for the thighs which should be 25 digits. The knees are 4 digits long and the sides of the ankles are 4 digits. It explains that the lower legs have 2 planes, where they join the sides of the ankles, they are 4 digits in breadth and in the middle are 6 digits in breadth. The planes of the knee should be made 3 digits in breadth. The breadth of both the thighs measured together at the upper side of the knees measures 8 digits. The front portion of the thighs is raised, and both of them should be swollen because of their muscles, and should look tender and devoid of unevenness, like the trunk of an elephant. The ankles and the knees and their veins should not be visible. The calves should be rounded and the foot arches should be made a little raised. The heels should measure 5 digits in height and 3 digits in breadth (NagCitLak III.735-784 in Goswamy and Dallapiccola 1976, pp. 88-89).

### Proportions and characteristics of feet and hands

The *Brhat Samhita* and the *Vishnudharmottara* explain that the feet are 12 digits long and 6 digits broad. The big toes are 3 digits in length and 5 in circumference and the second toe is 3 digits long. The remaining three toes should be less by an eighth than the preceding one. The elevation of the big toe should be 1 and  $\frac{1}{4}$  digits, and that of the other toes should be less by an eighth than the preceding one in succession. The nail of the big toe should be  $\frac{3}{4}$  of a digit, and those of the other toes  $\frac{1}{2}$  digit or a little lessened for each succeeding toe. The *Vishnudharmottara* adds that the index toe is equal to the big toe in length. The nail of the toe is less than the size of the toe by a quarter of an *angula* and the nail of the index toe is half of the one of the big toe. The remaining toes are less by one eighth of the index toe nail progressively. The heel is 3 *angulas* in breadth and 4 in height (ViDha 36.I.2-6 Dave Mukherji 2001, pp. 24-25; BrSam 58.18-20 in Bhat 1981, p. 553).

The *Citralakshana* of Nagnajit has different measurements, in fact both the feet measure 14 digits instead of 12. The big toes are 4 digits in length, resembling the points of the red lotus and shining like the molten of lac. The soles of the feet are stretched out and pressed firmly on the ground and they appear decorated with the sign of a wheel. The heels and the great toes should firmly touch the earth together. Along with these general injunctions, the *Citralakshana* of Nagnajit adds different measurements for kings. It explains that the webbed skin of the feet of the *cakravartin* resembles that of the wild goose, the feet are raised like the back of a tortoise and endowed with signs of beauty. In length they are 8 digits and in breadth they measure 5 digits and should look attractive. The big toe is 2 *angulas* in width, 6 in thickness and 4 in length, with the frontal point directed upwards. The next toe exceeds the big toe just a little. The length and the thickness of these is 3 digits (NagCitLak III.735-784 in Goswamy and Dallapiccola 1976, pp. 88-89).

The *Citralakshana* of Nagnajit continues, saying that the toes exceeding the big toe are to be reduced in measurement by 1 digit. The length and the thickness of the small toes should be pleasing, the joints attractive without protrusion, well rounded, without prominent veins, and with neither muscles nor veins visible. The nails should resemble the half moon, should be of red colour and lustrous, illuminated like the pupils



of the eye. Their luminous polish is produced by the juice of the safflower with which they are anointed. They shine, and they should be of red colour, spotless and smooth. The toe consists of three parts and the big toe is to be represented sideways so broad that the space between the great and the fourth toe should measure  $\frac{1}{2}$  of a digit in width. The foot, in height, measures 4 digits (NagCitLak III.785-810 in Goswamy and Dallapiccola 1976, pp. 89-91). The *Pratima-mana-lakshana* adds that the toes are said to be like a green mango in appearance, the top of the feet is like the back of a tortoise. The feet are flat and level to the ground and the nails have the form of oyster-shells (vv. 59-62 in Banerjea 1941, p. 403).

The *Vishnudharmottara* says that the palm of the hand is 7 *angulas* in length and 5 in width, whereas the *Brhat Samhita* maintains that its width is 6 *angulas*. The middle finger is 5 *angulas* in length and should be longer than the index by half a phalanx. The ring finger is equal to it. The little finger is less by a phalanx of the ring finger. All the fingers are equally divided into 3 phalanxes except for the thumb which is 3 *angulas* in length and has two phalanxes (ViDha 36.III.3-5 in Dave Mukherji 2001, pp. 22-23; BrSam 58.26-28 in Bhat 1981, pp. 554-555). The *Citralakshana* of Nagnajit confirms the measurements of the hand, except for the thumb which should be 4 digits in length (NagCitLak III.811-838 in Goswamy and Dallapiccola 1976, pp. 91-92). According to the *Pratima-mana-lakshana*, the width of the thumb is 9 *yavas* and the side measurement of the middle finger is  $8\frac{1}{2}$  *yavas*. Both ring finger and the index finger are 8 *yavas* wide and the little finger is 7 *yavas* (vv. 46-52 in Banerjea 1941, p. 401).

The *Citralakshana* of Nagnajit explains that the hand are covered with webbed skin. The nails are red in colour, shining and attractive, they should be wonderful like mother of pearl. They should be half the measurement of a phalanx, the points are thin and resemble the waist of the body. Blameless phalanxes are well-set, attractive, round and long. Both the palms resemble the red lotus: the lines are deep but not crooked. At both ends they are just a little deep and fine, resembling the colour of the blood of a hare. They should be beautified with three lines.<sup>17</sup> The palms are bedecked with signs

<sup>17</sup> This verse can be also found in the *Vishnudharmottara* (ViDha 37.6). Dave (1991, p. 383) explains that palmistry, an allied branch of physiognomy, had a part to play in the canons formulated in this verse. She also explains that according to palmistry as preserved in the

like those of the *shrivatsa* (Figure 22), *svastika*, *nandyavarta* and the wheel. They should have the feel of cotton and be soft as a bundle of silk. The muscles are full and the veins should not be visible. The back of the hand is raised and the palm has a slight depression. The skin webs between the fingers are tender and beautiful. The inner part of the nails is red like the *utpala* flower and is comparable to the hood of the *naga* king. The sides of the nails are soft, tender, luminous red in colour, large and shining. When they are raised and luminous, they lend the hand a special beauty (NagCitLak III.811-866 in Goswamy and Dallapiccola 1976, pp. 91-93).

### General characteristics of images

The *Brhat Samhita* and the *Pratima-mana-lakshana*, while explaining the theory of proportion, highlight some general characteristics of images (*pratima*) along with their merits and defects. These characteristics refer to portions of texts that traditionally are attributed to sculpture. However, it is possible to say that they pertain to painting by implication. These verses also share many similarities with the characteristics attributed to painting enumerated in 'The concept of painting according to the *citrasutras*' (chapter 2).

The *Pratima-mana-lakshana* states that pearl-garlands, waist-girdles, bracelets, armlets, earrings and well-arranged drapery should be made on the body of an image (v. 71 in Banerjea 1941, p. 405). The *Brhat Samhita* explains that an image should be made in such a way that its ornaments, dress, decorations and form conform to the traditions and practices of the country. If such an image is installed in a place, it will bestow prosperity on the people that live in its presence (BrSam 58.29 in Bhat, 1981, p. 555).

The *Pratima-mana-lakshana* also enumerates the merits and demerits of images. Merits of an image are well fixed seat of requisite length and breadth. The head is to be made like an umbrella and the neck like a conch. The body should be similar to that of a lion, arms like the trunk of an elephant and it should have a well shaped belly and thighs shaped like a plantain tree (vv. 72-77 in Banerjea 1941, p. 405). Defects and demerits of

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*purusha-lakshana* of the *Brhat Samhita*, three lines on the palm rising from the wrist upwards

an image are deficiency in the length and breadth. The eye-sight of an image turned towards the left, raised up, cast down, small or round eyes, eyes with squint and sunken belly are also demerits of an image. Other demerits are nose, eyes and fingers that are too short; shanks, neck and chin that are too long; head, ears, nose, joints, belly and nails that are too thick; hands, feet, eyes, neck, shoulders and arms that are too short (vv. 78-84 in Banerjea 1941, p. 406).

### Characteristics of kings

The *Vishnudharmottara* and the *Citralakshana* of Nagnajit enumerate a series of physiognomic and iconographic characteristics of kings. The figure of the king is prominent in all these texts. The *Citralakshana* takes the *cakravartin* as the basic stereotype embodying all the best qualities, but in these verses the king could be seen as an iconographic figure.

The *Vishnudharmottara* explains that all kings should be made with the characteristics of the great men or *maha-purusha-lakshanas*. Universal monarchs or *cakravartins* are to be portrayed with webbed fingers and toes. They should have an auspicious tuft of hair (*urna*) between the brows. On their palms they should have three beautiful prominent lines which are red like the blood of a hare and finely tapered (ViDha 37.4-6 in Sivaramamurti 1978, p. 171 and Dave 1991, p. 113).

The *Citralakshana* states that calves, thighs, pubis, armpits, ears, nostrils, neck, face and cheeks of kings are hairless. The breast of a king should be beautified and decked with down that goes upwards which is smooth, fine, rich and resembling the colour of antimony. It is beautiful when spiral in form and is turned into round circles. In the case of kings and gods, the hair on the head is fine and wavy and should be rendered beautiful with a sky-blue colour (NagCitLak III.969-986 in Goswamy and Dallapiccola 1976, pp. 98-99).

The *Citralakshana* maintains that the *cakravartin* should be represented like the molten gold of the Jambu River, like the hollow stem of a lotus in full bloom and like

the bright magnolia, saturated with colour. In his gait he excels like a master of dramatic art, like a teacher of beings. The colour of the skin of the *cakravartin* is spotless, untouched by dust or stain, fine, bright, pleasant smelling and smooth to touch like a mirror. His robe is white in colour, like flashes of precious stones emanating light, and is loosely arranged. The *cakravartin* should be painted as if surrounded by a blaze of light. A nimbus should be attached to his body and his neck resembles a conch (NagCitLak III.987-1056 in Goswamy and Dallapiccola 1976, pp. 99-102).

### Characteristics of gods

Texts enumerate a series of characteristics attributed to gods. The *Vishmudharmottara* maintains that gods are to be portrayed in the proportions of a *hamsa* type. They have hair only on their eyelashes and brows and they are free from hair on the rest of the body. They should be represented as a youth sixteen years old (ViDha 38.6-7 in Sivaramamurti 1978, p. 173). The same view is corroborated by the *Citralakshana* (NagCitLak III.969-986 in Goswamy and Dallapiccola, pp. 98-99). The *Vishmudharmottara* states that gods should always be portrayed with benevolent faces, with a smile in the eyes, adorned with crowns, necklaces, armlets, and bracelets. They should wear auspicious flower garlands, elaborate girdles, foot ornaments, sacred threads and ear ornaments. They are to be represented with loin cloths extending down to the left knee whereas the right knee should be exposed. They should also have a beautiful upper garment (ViDha 38.8-11 in Sivaramamurti 1978, pp. 174-175). Their halo should fit the head it decorates, in due proportion to it and it should be circular following the requirements of each of the gods. The colour of the halo should be the same as that of the gods themselves. In the case of idols to be worshipped, an upward, downward or oblique gaze should be avoided;<sup>18</sup> they should neither be too small nor too big, neither sad, wrathful nor harsh. The figure should be executed neither with a thin nor a large stomach. The figure should be neither large nor thin in proportion, harsh

<sup>18</sup> From this assertion we surmise that the eyes of a god can only look straight in front. This characteristic is common in Hindu icons but it is not the rule, as can be seen for the eyes of Shri

coloured with the face turning away or bent down. Inauspicious are also unpolished figures. Even when invoked by the best of *brahmins*, gods do not enter an image that is disproportionate and lacking in its significant characteristics. On the other hand, that image will always be infested by demons like *pishacas*, *daityas* and *danavas*. Gods are always to be depicted endowed with splendour and with the gait of the lion, bull, serpent or swan (ViDha 38.12-13, 16-17, 20-23, 26 in Dave Mukherji 2001, pp. 62-69).

The *Pratima-mana-lakshana* adds that the marks of the palm of the gods are of an auspicious character. Among them are conch-shell, lotus flower, flag, thunderbolt, wheel, *svastika* and *shrivatsa* (vv. 53-54 in Banerjea 1941, p. 402).

### Characteristics of women

Very little is said on the characteristics of women in the *citrasutras*. The reader is invited to construct the idea of women in the same way in which he is supposed to imagine the proportions of *bhadra*, *rucaka*, *malavya* and *shashaka* types. In fact, just as the *hamsa* type served as a model for the remaining four types of men, there are also five kinds of female types to be fashioned after the same male model (Dave 1991, p. 378). The *Vishnudharmottara*, *Citralakshana* of Nagnajit and *Brhat Samhita* are silent on the names of the female types, however the *Samarangana Sutradhara* (81.1) mentions *dandini* as the female counterpart of the *hamsa* type.

The *Vishnudharmottara* states that women should be made as tall as the men's shoulder. Their waist is two *angulas* less than that of the male. Similarly, their hips should exceed that of the male by four *angulas*. Chest and breasts are to be made beautiful (ViDha 37.1-4 in Sivaramamurti 1978, p. 171 and Dave 1991, p. 113).

The *Citralakshana* explains that women are to be represented as being of harmonious proportions and should appear chaste. They should be painted in groups, with their appearance full of youthfulness and erect in their stance (NagCitLak III.1142-1146 in Goswamy and Dallapiccola 1976, pp. 107-108).

### Characteristics of other figures

The division of men into five stereotypes becomes more significant when we read chapter 42 of the *Vishnudharmottara* (see Sivaramamurti 1978, pp.185-193 and Dave Mukherji 2001, pp. 184-205), in which a list of figures is described together with the proportions to be adopted in their representation.

The text (ViDha 42.1-9) explains that sages, *gandharvas*, *daityas*, *danavas*,<sup>19</sup> ministers, astrologers and royal priests are to be drawn according to the *bhadra* mode of proportion. The sages are all to be adorned with matted locks, wear black antelope skin as an upper garment, be physically emaciated and full of radiance. *Gandharvas* should be made like gods but they do not wear a crown. Ministers, astrologers and priests may wear all their ornaments but nothing superfluous. *Vidyadharas* are to be drawn in *bhadra* proportion and should be accompanied by their wives, wearing flower garlands and ornaments.

*Kinnaras*, *nagas* and *rakshasas* are to be portrayed in *malavya* proportion and *yakshas* in *rucaka* proportion. *Pishacas*, dwarfs, hunchbacks and *pramathaganas*<sup>20</sup> are to be represented regardless of proportions and colours. Womenfolk of all these are to be depicted in consonance with their proportions (ViDha 42.10-13).

Courtesans are to be represented in *rucaka* proportion and should wear flamboyant dress which is more appropriate for the erotic mood. Household women should be of *malavya* proportions. They should possess the ornament but not very excessively showy garments. The wives of *daityas*, *danavas*, *yakshas* and *rakshasas* are to be portrayed as beautiful and their mothers are to be delineated on the proportions of *malavya* (ViDha 42.24-27).

The *Vishnudharmottara* also maintains that *vaishyas* should be represented in *rucaka* proportions and the *shudras* in *shashaka* proportions (ViDha 42.29c-31). The text continues with a list of figures and their characteristics, such as different kinds of warriors, traders, servants, animals, personified rivers, mountains, oceans and weapons

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sect of Pushti Marg.

<sup>19</sup> *Daityas* and *danavas* are two classes of demons (Monier-Williams, 1994).

<sup>20</sup> *Pramathaganas* are a class of demons attending on Shiva (Monier-Williams, 1994).

(ViDha 42.32-55). In this list, however, there is no mention of the prototypes to be adopted in their representations.

## Conclusions

This chapter, while explaining fundamental concepts of Indian representation like measurement and proportion, has examined some important aspects of the theory of painting. Despite discrepancies between the texts, the theories of painting and of sculpture are strictly interrelated and rely on the same textual sources. As already pointed out, the sections of the *Brhat Samhita* (58) and *Pratima-mana-lakshana* used in this chapter are generally understood to concern the theory of sculpture. However, their injunctions in explaining measurement and proportion, embodied in the description of a man or image of 108 *angulas* in length, are similar to those described in the *Vishnudharmottara* and *Citralakshana* of Nagnajit. What does appear clear is that it would be misleading to divide the texts into two disciplinary categories on the basis of whether they concern the theory of painting or the theory of sculpture. This point is developed later below by drawing on empirical evidence of the practising sculptors. These examples are not to be taken as a contradiction because, if the theories of painting and sculpture rely on the same texts, the practice of painting and of sculpture relies on the same ideals.

Another point that emerges from this chapter is the significant role of physiognomy in the *citrasutras*. Physiognomy seems to have relevance only in early texts, with the exception of the *Samarangana Sutradhara*, an 11<sup>th</sup> century text which appears to follow the same tradition of dividing men and women into five stereotypes. This division, however, appears to have little relevance with painting and we can identify a more practical use for it in the *Vishnudharmottara* which explains, in its hierarchy of figures, the way in which they should be depicted according to this division.

Many of the physiognomic characteristics mentioned by the texts, such as the arms like an elephant or voice like a swan, do not seem to have an iconographic value, and, even if they do, it is difficult to recognise it in actual painting or sculpture. This

difficulty emanates from the culture-specific origin of the characteristics. These injunctions are better understood within the framework of the chapters on physiognomy of the *Brhat Samhita* and *Saravali*, which help us to understand some of the characteristics that seem to have more of a symbolic significance than a practical one. An interesting exception is the conch-like neck, whose iconographic feature is clearly explained by the *Citralakshana*, and can also be seen in actual paintings in which the figures are depicted with three lines on their neck (Figure 23). This ideal is shared by Buddhist schools of painting, like for example in Sri Lanka and Tibet (Figures 24 and 25).

Each text analysed in this chapter formulates an ideal of proportion and beauty. Texts appear different in their descriptions as evidenced by their differing measurements suggested for the various limbs or by the importance they attach to physiognomy. In spite of these discrepancies, it is possible to see some similarities between the *citrasutras*, like the great emphasis they give to proportion and perfection. Similarities and links can be seen also between the views of the texts and the ideals of beauty and proportion expressed by the traditional sculptors and painters of today, as it will be elucidated by the following examples.

In some particular instances, it is possible to recognise the physiognomic prescriptions of the *Citralakshana* of Nagnajit as having a practical and iconographic value and use. For example, a traditional sculptor based in Jaipur (Rajasthan), Ram Prasad Sharma, explains that the body of an image should be represented without hair, with spotless skin and with invisible veins. These characteristics, he explains, would create a “natural” look. His use of the word “natural” is a clear indication of his world view and it seems to embody his own aesthetic values and ideals of perfection, which he also uses in considering the proportion of an image.

As far as the system of measurement is concerned we have suggested that while reading the texts one should work out one’s own personal *angula* that has the function to help us in understanding the texts, and become aware of the proportions of one’s own body. One of the sculptors, Ram Prasad Sharma, in fact explains the theory of proportion using as examples either one of his sculptures or his own body. This appears to explain the discrepancies in the described proportions of the parts of the body found



in the *citrasutras*, and is evidenced by a comparison of the various texts. An example is the length of the eye which should be 2 *angulas* for the *Citralakshana* and the *Brhat Samhita*, 2 *angulas* and 2 *yavas* for the *Pratima-mana-lakshana* and 3 *angulas* for the *Vishnudharmottara*. These discrepancies can be understood as a reflection of the different ways of seeing or perceiving the human body. Awareness of this point is the first step in the theory of proportion, and once the system is well assimilated, it will be possible for a painter or a sculptor to create bigger and smaller figures by increasing or decreasing the unit of measurement, which in this case will take the name of *dehangula* or *angula* of the image. In this sense, the absolute and relative systems of measurement can be compared to two levels of perceiving the different units, one abstract and the other practical.

As far as the terminology and the use of these measurements are concerned, we found that, even if the sculptors and painters interviewed have no idea of the systems delineated by the *citrasutras*, they know and work with their basic concepts. For example the concepts of unit or *angula* (*angul*) and that of *tala* (*tal* or *bhag*: part, division) are used in practice to get the right proportion of an image.

Another clear example of relationship between text and practice is that of Harihar Moharana, a sculptor from Bhubaneshtar (Orissa), who claims to know a classification of eyes. His description bears a lot of similarities (though it is not identical) with the classifications of the *Vishnudharmottara* and *Citralakshana*. He says that eyes can be like a *mrga* (deer) when they make quick movements as if they were afraid of something, the eyes like a *mina* (fish) are small and half closed, the eyes like a *padma* or lotus are the eyes of gods like Krishna and Narayana, the swollen eyes are the eyes for Buddha and Jina, and the *kanya* eyes are for the *apsaras* and look like a bird. He also makes practical examples of their representations and he claims that this classificatory system is used in sculpture.

Another fundamental point raised in this chapter is that of the central importance of achieving the right proportions. This is a fundamental step in the creation of an image and making something wrong would affect the entire work. The ideal of perfection and that of "natural" and beautiful effect are used by Ram Prasad Sharma, to calculate the proportions of the body of Lakshmi (Figure 23). This sculptor has a working knowledge

of the theory of proportion and with the help of a compass (*parkar*) he explains this image in his own terms. He explains, for example, that the length of the hand of Lakshmi is equal to the length of the face; the breadth of the hand is equal to the breadth of half the face; the end of the eye stands on the same line with the top of the ear, and the mouth stands on the same line of the bottom of the ear (see horizontal lines in chapter 4). He also illustrates that the length of the nose is equal to the thickness of the wrist, the circumference of the thigh is equal to that of the head, and the distance between the navel and the eyebrow is equal to the length of the leg from knee to foot. He also adds that in order to achieve proportion and beauty the distance between the shoulder and the third or fourth hand of the goddess (and of any other image with more than two arms) should not exceed the length of the shoulder itself.

Ram Prasad elucidates his ideals of beauty and perfection (which are synonymous with proportion) by comparing his image of Lakshmi with a Giovanni Bellini's portrait of a young woman (Figure 27). In his view, he regards his image of Lakshmi as perfect, and the portrait of the lady as unnatural and unproportionate. Applying his rules and ideals, the sculptor explains that the major defects of this Renaissance figure are that the woman has a huge belly and very big arms. He also explains that each person has different proportions but "defects" like a huge belly should never be depicted, unless it is really necessary, as in the case of Ganesha. We can conclude that the aim of his sculpture is to create highly ideal figures. According to his view, he considers for example that Michelangelo's sculptures, of which he has some illustrations, are natural and proportionate. His experiments to copy them, however, are unsuccessful also at his eyes. This is probably due to the different vocabulary and aesthetic ideals of the Indian sculptor and Renaissance. In his experiments, in fact the sculptor uses his own ideals, like the absence of veins and muscles, characteristics that are fundamental in the sculpture of Michelangelo.

In order to achieve perfection in measurement and proportion of an image sculptors and painters use a compass or *parkar* (Figure 28). Its use has been mentioned in the previous discussion and can also be seen in a Jaina studio in the Murti Mohalla of

Jaipur (Figure 29).<sup>21</sup> Also the sculptors of this studio consider proportion as a fundamental factor but the way in which “perfection” is achieved is different. This studio is specialised in the representation of *tirthankaras*. Every detail of their bodies is reproduced by copying from a figure on paper representing the twelfth *tirthankara* Vasupujya (Figure 30). When asked, the master sculptor did not describe measurement and features of this image as Ram Prasad did, but simply showed the figure on paper saying that he is “copying” from it. This figure is divided into units with the help of a grid, and through this division the sculptors can create images of the *tirthankaras* in different scales. The role of the compass is fundamental to achieving the right proportions of the figure (Figure 31). The work of this studio is more stereotyped than that of the previous one, however, as we can see that once the proportions of an image are fixed, the work is not a mere copy from the figure; there is still freedom to decide, and the artist can change, for example, the hand postures or the decoration of the images.

This concluding section highlights that it is possible to identify a link between text and practice. This link, however, is not and cannot be a direct and literal one. Even if painters disclaim any sort of direct knowledge of the texts, it is undeniable that the examples given in this section resemble, in many points, the textual evidence analysed previously. This point is similarly emphasised in an analysis of *lambamana* and *talamana*, which are considered in the following chapter.

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<sup>21</sup> Murti Mohalla is one of the parts of the old city of Jaipur in which sculptors live and work. The main road of this suburb is Khazanevalon ka Rasta.

## Chapter 4

### *Talamana and Lambamana Systems*

This chapter analyses two concepts of proportion according to the *citrasutras*: *talamana* and *lambamana*. These two systems are very helpful for the creation of a harmonious and proportionate body in both painting and sculpture. The *talamana* seems to derive directly from an evolution of the theory of proportion explained in the previous chapter, and on the basis of that knowledge the *talamana* system permits the creation of taller and shorter figures than the prototype of 108 *angulas* in length. This system is analysed according to the *Devata-murti-prakarana*,<sup>1</sup> *Shukraniti*,<sup>2</sup> *Pratima-mana-lakshana* and *Citrakarmashastra*.<sup>3</sup> This chapter will also examine one of the first studies of the *talamana* which was carried out by Rao (1920), in order to clarify some of the misunderstandings that accompanied his interpretation of the system.

The *lambamana* is one of six ways of measuring an image and seems to suggest a way to create proportion and symmetry. This system is relevant to the study of painting and sculpture, and it is also used in some texts, like the *Shilparatna*, to explain stances. The *lambamana* is analysed according to the *Manasollasa*, *Shilparatna* and *Citrakarmashastra*.

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<sup>1</sup> The *Devata-murti-prakarana* (Vinaysagar, 1999) is one of the texts attributed to the architect Mandana Sutradhara who worked under the patronage of Maharana Kumbha of Mewar (1433-1468). This is a text in eight chapters on various aspects of Hindu and Jain iconography.

<sup>2</sup> The *Shukraniti* is a work on politics and deals with the functions and duties of kings. It is ascribed to Shukra or Ushana, and according to Winternitz (1985, p. 644) it is a "work of quite a recent age." The section on image making of the *Shukraniti* can be considered as a 'guide' for kings to recognise auspicious and inauspicious images and to take care of them in order to be protected from the gods.

<sup>3</sup> The *Citrakarmashastra* is a Sri Lankan text written in Sanskrit and is devoted to Buddhist monastic architecture and image making, including iconometry, iconography and related topics. Marasinghe (1994, p. vii) states that this text can be dated to few centuries earlier than the other Sri Lankan text on iconography, the *Bimbamana*, which probably belongs to the 11<sup>th</sup> or 12<sup>th</sup> century.

### *Talamana*

The *talamana* system has generally been analysed by scholars as a concept pertaining to sculpture. The division of sculptural and pictorial theory has already been criticised in this work. Moreover, the *Shukraniti*, before explaining the *talamana* system, states that images are made of sands, pastes, paints, enamels, earth, woods, stones and metals (4.147-151, Sarkar 1975, pp. 167-168). This clarifies that the *talamana* is relevant to all kinds of images, including pictorial ones.

Rao (1920) was the first to analyse the *talamana* systematically and lists the different proportions of images, taking them from some unspecified *agamas*, in the table reported in figure 31. Rao (1920, p. 35) explains that the term *tala* means the palm of the hand, which is the measure of length equal to that between the tip of the middle finger and the end of the palm near the wrist. This length is taken to be equal to the length of the face from the scalp to the chin. It is therefore usual to measure the total length of an image in terms of the length of the face rather than in terms of the palm of the hand. Rao (1920, p. 35) states that there are no less than thirty different proportions mentioned in the *agamas*. These are grouped into ten classes of three each. Of the three proportions of each class, the first is called *uttama* (superior), the second is *madhyama* (middling) and the third is *adhama* (inferior). Among the texts analysed in this chapter, only the *Citrakarmashastra* (Marasinghe, 1991) makes the distinction of images in three classes. Each of the texts analysed gives priority to different kinds of *talas*. The most important are:

- shodasha tala* or sixteen *tala* measurement
- pancadasha tala* or fifteen *tala* measurement
- caturdasha tala* or fourteen *tala* measurement
- trayodasha tala* or thirteen *tala* measurement
- dvadasha tala* or twelve *tala* measurement
- ekadasha tala* or eleven *tala* measurement
- dasha tala* or ten *tala* measurement
- navarddha tala* or nine and a half *tala* measurement

*nava tala* or nine *tala* measurement  
*ashtasarddha tala* or eight and a half *tala* measurement  
*ashta tala* or eight *tala* measurement  
*saptasarddha tala* or seven and a half *tala* measurement  
*sapta tala* or seven *tala* measurement  
*shat tala* or six *tala* measurement  
*panca tala* or five *tala* measurement  
*catus tala* or four *tala* measurement  
*tri tala* or three *tala* measurement  
*dvi tala* or two *tala* measurement  
*eka tala* or one *tala* measurement

As mentioned in the last chapter, the *tala* measurement, consisting of 12 *angulas*, was the basis of calculation for images. The height of the image described in that chapter was 108 *angulas*, which corresponds in the *talamana* system to the *nava tala* or nine *tala* measurement. This means that the image can be divided into nine parts or *talas*. In fact, if we divide 108 *angulas* by 12, which is the measurement in *angulas* of the face, the result would be 9. Although the exposition of proportions of the 108 *angulas* image had priority over other images, we can find in early texts a prelude to the *talamana* system. A text like the *Brhat Samhita* (58.30 in Bhat 1981, p. 556) mentions that both Shri Rama, son of King Dasharatha and Bali, son of Virocana, should be made 120 digits high. It also explains that the heights of other images, superior (*pravara*), medium (*sama*) and inferior (*nyuna*) ones, are less by 12 digits in succession (108, 96 and 84 digits in order). This means that early texts recognised the existence of images having other measurements. Moreover, a text like the *Matsya Purana* divides the body of an image exactly in the same way in which it is done in the *talamana* system.<sup>4</sup> However, an accurate description of the system is to be found in later texts, like the *Devata-murti-prakarana*.

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<sup>4</sup> See the section "System of proportion" in chapter 3.

At this point it is important to remember that measurement is a relative concept in the *citrasutras*, and that figures, according to the *tala* system, are not bigger or smaller in terms of scale, but in terms of the proportions of the parts the body of each image.

According to the *Devata-murti-prakarana* of Mandana Sutradhara (Vinayasagar, 1999), a *kirtimukha* (Figure 32) should be made of one *tala*,<sup>5</sup> birds of two *talas*, elephants of three *talas* and horses of four *talas* (*veda-tala*). The hunchbacked Vamana, seated Jina, seated images of Brahma, Vishnu, Shiva, Shiva's bull Nandi and Varaha, should be of 5 *talas*. Vinayaka (Ganesha), medium scale Varaha and Vrishabha (Nandi) should be of 6 *talas*. Human beings, large scale images of Varaha and Nandi are 7 *talas*. Parvati, Mother-goddesses, Durga, Lila, Mahalakshmi, Sarasvati, Kalindi, Savitri, Nanda, Padmavati, Katyayani are 8 *talas*. Brahma and Vishnu are 9 *talas*. Rama, Bali, Vairocana, standing *siddhas* and standing *jinendras* (Jain saints) should be of 10 *talas*. Skanda, Hanuman, goddess Candika and *bhutas* should be 11 *talas*. *Vetala* demons should be 12 *talas*. *Rakshasas*, *pishacas* and other evil beings should be of 13 *talas* without crowns. *Daityendras* with crowns are 14 *talas*. Awe-inspiring gods are 15 *talas*. Goddesses that are terrible to behold should be 16 *talas*. Images should not be taller than 16 *talas* (2.4-14 in Vinayasagar 1999, pp. 53-56).<sup>6</sup>

The *Devata-murti-prakarana* enumerates sixteen kinds of *tala* measurements, but when it comes to the description of their proportions, the text explains 7, 7 ½, 8, 8 ½ and 9 *tala* measurements only. The text introduces the 7 ½ and 8 ½ *talas* which are not found in the previous list. This discrepancy between the list of *talas* and their

<sup>5</sup> A *kirtimukha* is a grotesque mask widely used as a decorative element in Indian temple architecture. It is represented in one *tala* or *eka-tala* which means that it is constituted by its head only, as shown in Figure 32.

<sup>6</sup> The *Aparajitapreccha* (Dubey 1987, pp. 278-279) follows the system of sixteen categories of *talas* delineated in the *Devata-murti-prakarana*. These categories are also ranging from the *eka-tala* or one *tala* to the *shodasha-tala* or sixteen *talas*. The *Aparajitapreccha* explains that one *tala* is for *kirtivaktras* (*kirtimukha*) and fish, two *talas* for birds, three *talas* for elephants, four *talas* for horses, five *talas* for *kinaras*, six *talas* for *gananaayaka* and *yakshas*, seven for men, eight for goddesses, nine for all the deities, ten for Rama, Vishnu, Vairocana, *siddhas* and *jin*as, eleven *talas* for Rudra and *bhutas*, twelve *talas* for Madhu, Mura and *vetala* demons, thirteen for *rakshasas*, fourteen *talas* for *danavas*, fifteen *talas* for Camunda and *bhrgus*, sixteen for Jatamukuta and Candralankrta.

explanation is a common aspect of other texts too. This means that we are invited to calculate the measurements of the other *talas* on the base of the ones that are explained.

Details of the seven *tala* measurement (*sapta tala*) according to the *Devata-murti-prakarana* are as follows: the hair is 3 *angulas*, face is 12 *angulas* and neck is 3 *angulas*, the chest is 7 ½ *angulas* and the stomach is 9 *angulas*. The distance from the navel and the genitals (*medhra*) is 7 ½, and from the *medhra* through the thigh and to the knee is 18 *angulas*. The knee should be 3 *angulas*, the distance between the knee and the ankle is 18 *angulas* and from the ankle to the sole of the foot is 3 *angulas* (2.15-17 in Vinayasagar 1999, pp. 56-57). The total length of a *sapta tala* image according to the *Devata-murti-prakarana* is 84 *angulas* (Vinayasagar 1999, p. 57), corresponding exactly to the *madhyama sapta tala* of Rao's table (Figure 31). Another interpretation of the *sapta tala* can be seen in the representations in figure 33 for which Sthapati (2002) claims the *Manasara* as his source.

The *Devata-murti-prakarana* explains that seven and a half *tala* measurement (*saptasarddha tala*) is suitable for images of Mangala (Mars), Shukra (Venus), Budha (Mercury), Sauri (Saturn) and other planets. The hair is 3 *angulas*, the face is 12 *angulas*, the neck is 3, the chest is 10, the stomach is 10, the distance from the navel to the *medhra* is 10 *angulas*. From the *medhra* through the thigh to the knee is 18 *angulas*. The knee is 3 *angulas*, from the knee to the ankle bone is 18 *angulas*, from the ankle to the sole of the foot is 3 *angulas* (2.18-20 in Vinayasagar 1999, pp. 57-58). The total length of an image of seven and a half *talas* is 90 *angulas* (Vinayasagar 1999, p. 58).

Eight *tala* measurement (*ashta tala*) is a characteristic of Devi and Candi. The hair is 3 *angulas*, the face is 12 *angulas*, the neck is 3 *angulas*, the chest is 9, the stomach is 12 *angulas* and the distance from the navel to the *medhra* is 9 *angulas*. The thigh is 21 *angulas*, the knee is 3 *angulas*, from the knee to the ankle is 21 *angulas*, and from the ankle to the sole of the foot is 3 *angulas* (2.21-23 in Vinayasagar 1999, pp. 58-59). The total length of an image of eight *talas* according to the *Devata-murti-prakarana* is 96 *angulas* (Vinayasagar 1999, p. 59). This measurement corresponds to the *madhyama ashta tala* of Rao's table (Figure 31). In figure 34, Sthapati presents a



different interpretation of this *tala*, probably drawn after the *Shilparatna*. Here for example the face is 11 *angulas* instead of 12.

The text explains that eight and a half *tala* measurement (*ashtasaraddha tala*) is the characteristic of Gishpati. The hair is 3 *angulas*, the face is 12 *angulas*, the neck is 3 *angulas*, chest is 9 *angulas* and stomach is 13 *angulas*. From the navel to the *medhra* is 12 *angulas*, the thigh is 22 *angulas*, the knee is 3 *angulas*, from the knee to the ankle is 22 *angulas*, from the ankle to the foot is 3 *angulas* (2.24-26 in Vinayasagar 1999, pp. 59-60). The total length of this figure is 102 *angulas* (Vinayasagar 1999, p. 60).

The *Devata-murti-prakarana* states that nine *tala* measurement (*nava tala*) (Figure 35) is the characteristic of Brahma and other gods. The hair is 3 *angulas*, the face is 12 *angulas*, the neck is 3 *angulas*, the chest is 10 *angulas*, the distance between the chest and the navel is 12 *angulas*. From the navel to the stomach area there should be 4 *angulas*, and from the stomach to the base of the torso 8 *angulas*. From this to the knee the distance should be 24 *angulas*, as should be the distance between the knee and the ankle. The knee should be 4 *angulas*, as should be the distance from the ankle to the foot (2.27-29 in Vinayasagar 1999, pp. 60-61). The total length of this image is 108 *angulas* (Vinayasagar 1999, p. 61). The *Devata-murti-prakarana* explains the nine *tala* in more detail, giving other measurements too. This confirms the importance of this image length, as in the previous chapter. The text prescribes that the distance between the breasts should be 12 *angulas*, between the breasts and the armpits 4 *angulas* and between the armpits and arms 1 *angula*. The upper arms should be 7 *angulas* wide and 16 *angulas* in length, the forearms should be 18 *angulas* in length and the wrist 3 *angulas* in width. The hands should be 12 *angulas* long and 5 wide. The region of the navel should be 12 *angulas* in width and the hips are 24.<sup>7</sup> The thigh is 11 *angulas* wide. The part of the shank, near the ankle should be 4 *angulas*. The foot should be 14 *angulas* long with a height of 4 *angulas*. The shoulders, from the armpit upwards,

<sup>7</sup> The *Devata-murti-prakarana* uses an interesting way of expressing numbers symbolically. 12 *angulas* is expressed using the word *surya-angula*, this is because Surya represents symbolically the number 12, Surya is in fact one of the 12 Adityas (see also Monier-Williams 1994, p. 1243). The number 24 is mentioned symbolically as *jina-angula* to represent the 24 *jinās*.

should be 8 *angulas*. The neck should be 8 *angulas*, and the feet 6 *angulas* wide (2.30-34 in Vinayasagar 1999, pp. 61-62).

The *talamana* measurements according to the *Devata-murti-prakarana* can be summarised by the following table.

**Table III**  
***Talamana of the Devata-murti-prakarana***

Parts of the body	<i>Sapta tala</i> (7 <i>talas</i> )	<i>Saptasarddha tala</i> (7 ½ <i>talas</i> )	<i>Ashta tala</i> (8 <i>talas</i> )	<i>Ashasarddha tala</i> (8 ½ <i>talas</i> )	<i>Nava tala</i> (9 <i>talas</i> )
Hair	3	3	3	3	3
Face	12	12	12	12	12
Neck	3	3	3	3	3
Chest	7 and 4 <i>yavas</i>	10	9	9	10
Stomach	9	10	12	13	12
Navel to genitals	7 and 4 <i>yavas</i>	10	9	12	12
Thigh	18	18	21	22	24
Knee	3	3	3	3	4
Shank	18	18	21	22	24
Foot	3	3	3	3	4
<b>Total length</b>	84 <i>angulas</i>	90 <i>angulas</i>	96 <i>angulas</i>	102 <i>angulas</i>	108 <i>angulas</i>

The *Pratima-mana-lakshana* presents a different hierarchy of figures, explaining that gods should measure 9 *talas*, gods like men 8 ½ *talas*, ordinary men are 8 *talas* and mothers 7 ½ *talas* (vv. 85-86 in Banerjea 1941, p. 406). The text analyses different *talas* from the ones mentioned above, in order they are the eight, six, ten, seven and four *talas*. The *nava-tala* or nine *tala* measurement according to the *Pratima-mana-lakshana* is partly described in the previous chapter. The length of this *tala* measurement is widely attested by many other texts as 108 *angulas*, but the total length of this *tala* in the *Pratima-mana-lakshana* is 114 *angulas* (see table IV).

According to this text, the Devi images are 8 *talas* (Figure 34) which means that a Devi image should be represented as eight times the height of the face (96 *angulas*). However, the measurements given by the text contradict with the total length of the

image. The face of a Devi image is 6 *kalas* and the torso is 11 *kalas*. The width of the neck, breasts and the space between the two nipples are half a *tala*. The hip should be made 20 *angulas* and the thighs 11 *kalas*. The knees are 3 *angulas* and the calf of the leg is 20 *angulas*. The ankle should be made 2 *angulas* (vv. 87-90 in Banerjea 1941, p. 407). The total length of this image is 101 *angulas*, which is one *angula* more than the *uttama ashta tala* measurement of Rao's table (Figure 31).

Children or gods in the shape of boys, Senapati (Karttikeya), *vinayakas* (class of demons) and *yakshas* are 6 *talas*. The hair is 1 *golaka* and the face is 6 *golakas*, the neck is 2 *angulas* and the torso is 20 *angulas*. The navel is  $\frac{1}{2}$  *golaka* and its depth is 1 *angula*. The thighs should be made 7 *kalas* and the knees are 1 *golaka*, the calves are 6 *kalas* and the ankle is 1 *angula*. The heel is 3 *angulas* (vv. 95-102 in Banerjea 1941, pp. 408). The total length of this image is 69 *angulas*, which is one *angula* more than the *adhama shat tala* measurement of Rao's table (Figure 31).

According to the *Pratima-mana-lakshana*, the ten *tala* measurement (*dasha-tala*) (Figure 36) is recommended for Brahma, goddess Carcika, sages, *brahmarakshasas*, celestial beings and *buddhas* (vv. 110-111 in Banerjea 1941, p. 410). The hair should be 2 *golakas*, the face 6 *golakas*, the neck should be 2 *golakas* and the torso 26 *angulas*. The hip should be 5 *kalas*, the thighs are 26 *angulas*, the knee is 5 *angulas*. The shanks are 26 *angulas*, the ankle is 3 *angulas*, the heel is 5 *angulas*. The portion of the upper arm is 8 *golakas* and the forearm is 10 *golakas*. The palm with the fingers is 6 *kalas* (vv. 112-116 in Banerjea 1941, p. 410). The total length of this image is 121 *angulas*, one *angula* more than the *madhyama dasha tala* of Rao's table (Figure 31).

The *Pratima-mana-lakshana* explains the characteristics of the seven *tala* measurement (*sapta tala*) (Figure 33) as follows: the hair is 3 *angulas*, the face is 6 *kalas*, the neck is 3 *angulas*, and it should be made with the conch-shell mark. The torso is 19 *angulas*, well adorned with proportions and roundness (vv. 117-118 in Banerjea 1941, p. 410). The hip is 1 *golaka*, the thighs are 19 *angulas*, the knees are 3 *angulas*, the shanks are 19 *angulas*, the ankles are 1 *angula* and the heels are 2 *angulas*. The total length of this image is 83 *angulas*, which is one *angula* less than the *madhyama sapta tala* of Rao's table (Figure 31).

According to the *Pratima-mana-lakshana* the *catus-tala* or four *tala* measurement (Figures 37 and 38) is the characteristic of dwarfs. The head should be 1 *angula*, the face is 12 *angulas*, the neck is 1 *angula*, the torso is 12 *angulas* and the hip is 1 *angula*. The thigh should be 9 *angulas*, the knee is 1 *angula*, the shank is 9 *angulas* and the ankle is ½ *angulas*, the heel is 1 *angula*. The total length of this image is 47 ½ *angulas*, which is half an *angula* less than the *madhyama catus tala* of Rao's table (Figure 31).

The following table summarises the *talamana* measurements according to the *Pratima-mana-lakshana*.

**Table IV**  
***Talamana of the Pratima-mana-lakshana***

Parts of the body	<i>Catus tala</i> (4 <i>talas</i> )	<i>Shat tala</i> (6 <i>talas</i> )	<i>Sapta tala</i> (7 <i>talas</i> )	<i>Ashta tala</i> (8 <i>talas</i> )	<i>Nava tala</i> (9 <i>talas</i> )	<i>Dasha tala</i> (10 <i>talas</i> )
Hair	1	2	3	-	4	4
Face	12	12	12	12	12	12
Neck	1	2	3	-	4	4
Torso	12	20	19	22	24	26
Navel to genitals	1	1 (navel)	2	20	12	10
Thigh	9	14	19	22	24	26
Knee	1	2	3	3	4	5
Shank	9	12	19	20	24	26
Ankle	4 <i>yavas</i>	1	1	2	2	3
Foot	1	3	2	-	4	5
<b>Total length</b>	47 <i>angulas</i> and 4 <i>yavas</i>	69 <i>angulas</i>	83 <i>angulas</i>	101 <i>angulas</i>	114 <i>angulas</i>	121 <i>angulas</i>

The *Shukraniti* (Sarkar, 1975) introduces its description of the *talamana* stating that images are of ten *talas* in the *satyayuga*, of nine *talas* in the *tretayuga*, eight *talas* in the *dvaparayuga* and seven *talas* in the *kaliyuga*<sup>8</sup> (4.185-185 in Sarkar 1975, p. 169). The text states that the image of dwarfs is seven *talas*, that of men is eight *talas*, that of gods is nine *talas*, that of *rakshasas* is ten *talas* and it clarifies that the height of images varies according to the customs of localities, but the images of females and dwarfs are always seven *talas*. The *Shukraniti* explains that Nara, Narayana, Rama, Indra,

Bhargava and Arjuna are of ten *talas*. Candi, Bhairava, Vetala, Narasimha, Varaha, Hayashirsha and others who are of a vehement type are to be twelve *talas*. The images of *pishacas* and *asuras* are always sixteen *talas*. Also Hiranyakashipu, Vrtra, Hiranyaksha, Ravana, Kumbhakarna, Namuci, Nishumbha, Shumbha, Mahishasura, Raktavija are of sixteen *talas*. The *balas* (boys under five years of age) are five *talas* and the *kumaras* (infant) are six *talas* (4.171-183 in Sarkar 1975, p. 169).

The *Shukraniti* explains the nine *tala* measurement (Figure 35) as follows: the face is one *tala*, the neck is 4 *angulas*, the space from the neck to the heart is one *tala*. From the heart to the navel is one *tala*, from the navel to the *medhra* is one *tala*. The thigh is 2 *talas*, the knee is 4 *angulas*. From the knee to the ankle is 2 *talas* and from the ankle to the sole is 4 *angulas* (4.186-193 in Sarkar 1975, p. 170). The total length of the image is 108 *angulas*.

According to the *Shukraniti*, in an image of seven *talas* (Figure 33) the face is 12 *angulas*, the length of the neck is 3 *angulas*. The heart is nine *angulas*. The belly and abdomen are 18 *angulas*. The knee is three *angulas* and legs and thighs are 18 *angulas*. The space from the ankle to the end is to be three *angulas* (4.365-380 in Sarkar 1975, pp. 179-180). The total length of this image is 84 *angulas* corresponding to the *madhyama sapta tala* of Rao's table (Figure 31). In the case of women, who belong to the seven *tala* type, the text prescribes that the height and thickness of the breasts is 5 *angulas* and the circumference of the waist is three *talas* and two *angulas* (4.362-364 in Sarkar 1975, p. 179).

In the explanation of the eight *tala* (Figure 34), the *Shukraniti* does not mention the measurement of the face but we should consider it to measure 12 *angulas*. The text states that the neck is of the number of the *vedas* (4 *angulas*), the heart is 10 *angulas*, from heart to navel is 10, from navel to *medhra* is 10, the thigh is 21 *angulas*, the knee is 4 *angulas*, from knee to ankle is 21 *angulas* and the foot is 4 *angulas* (4.381-385 in Sarkar 1975, p. 180). If we consider the face being of 12 *angulas*, the total length would be 96 *angulas*, like the *madhyama dasha tala* of Rao's table (Figure 31).

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<sup>8</sup> These are the four *yugas* or ages of the world according to the traditional Indian system of chronology (see also Dowson 1992, pp. 381-383).

The face and the breast of a ten *tala* image (Figure 36), according to the *Shukraniti*, are 13 *angulas* each. The belly and the abdomen are 10 *angulas* each. The foot and the neck are 5 *angulas*. The measurement of the knee is not given but it would be of 5 *angulas*.<sup>9</sup> The thighs and legs are 26 *angulas* each. The text adds that in an image of ten *talas* there should be a jewel at the head, measuring one *angula* (4.386-390 in Sarkar 1975, pp. 180-181). If we consider the knee measuring 5 *angulas*, the total length of this image would be 113 *angulas*, which is three *angulas* less than the *adhama dasha tala* of Rao's table (Figure 31).

The *talamana* measurements according to the *Shukraniti* are summarized in the following table:

**Table V**  
***Talamana of the Shukraniti***

Parts of the body	<i>Sapta tala</i> (7 <i>talas</i> )	<i>Ashta tala</i> (8 <i>talas</i> )	<i>Nava tala</i> (9 <i>talas</i> )	<i>Dasha tala</i> (10 <i>talas</i> )
Face	12	(12)	12	13
Neck	3	4	4	5
Chest	9	10	12	13
Stomach	9	10	12	10
Navel to genitals	9	10	12	10
Thigh	18	21	24	26
Knee	3	4	4	(5)
Shank	18	21	24	26
Foot	3	4	4	5
<b>Total length</b>	84 <i>angulas</i>	96 <i>angulas</i>	108 <i>angulas</i>	113 <i>angulas</i>

The *Shukraniti* further enjoins that in an image of ten *talas* the hands are to be of 15 *angulas*, whereas in an image of less height, hands are to be less by two *angulas* in each case. As for the feet, in an image of ten *talas* they should be fifteen *angulas*, whereas in the images of less height, the feet are to be less by one *angula*. In the images

<sup>9</sup> This measurement can be inferred from the fact that in the *Shukraniti* the neck, ankle and knee are always constituted by the same number of *angulas*.

of greater height the skilled artist should give one *angula* more to the face and other limbs per total increase of one *tala* (4.392-400 in Sarkar 1975, p. 181-182). The measurements of hands and feet can be summarised as follows:

**Table VI**  
**Measurement of hands and feet of the *Shukraniti***

	Ten <i>tala</i>	Nine <i>tala</i>	Eight <i>tala</i>	Seven <i>tala</i>
Hands	15	13	11	9
Feet	15	14	13	12

According to the *Citrakarmashastra* (Marasinghe 1991), there are twenty-four different measurements for images, beginning from the ten *tala* measurement to the three *tala* measurement, each of which is constituted by three different types: *uttama*, *madhyama* and *adhama*. This text gives great importance to the ten *tala* measurement which is the one prescribed for all *bodhisattvas* and divine beings (8.1-3 in Marasinghe 1991, pp. 36-37). The text enumerates the other *tala* measurements as follows: the nine and a half *tala* is recommended for goddesses and females of divine beings, the *uttama nava tala* is for *gandharvas* and the Lord of Serpents. *Garudas* and *daityakas* belong to the *uttama*, *madhyama* and *adhama* varieties of the eight *tala*. *Pishacas* are of seven *talas* and cripples are of six *talas*. Dwarfs are of five *talas*, *bhutas* of four *talas*, *kinnaras* are of the *uttama*, *madhyama* and *adhama* types of the three *tala* measurement (8.4-7 in Marasinghe 1991, p. 37). After enumerating this hierarchy of figures, the text concentrates on the analysis of the *uttama*, *madhyama* and *adhama dasha tala* measurements.

In the introduction to the *uttama dasha tala*, the *Citrakarmashastra* states that its length is 124 *angulas* (Figure 39). The crown or the head is 4 *angulas* and 3 *yavas*, the face is 13 ½ *angulas* (Figure 40), the *gala* (the fleshy part below the chin) is half an *angula*, the neck is 3 ½ *angulas*, from the neck to the navel is 27 *angulas*, from the navel to the *medhra* is 13 ½ *angulas*, the thigh and shanks are 27 *angulas* each and the knee and foot are 4 *angulas* each (14.1-7 in Marasinghe 1991, p. 75). All these parts

together bring the total height of the *uttama dasha tala* to 124 *angulas* and 3 *yavas* instead of the 124 mentioned previously by the text and by Rao's table (Figure 31).

The *madhyama dasha tala* (Figure 41) has a total length of 120 *angulas* which agrees with Rao's table. The crown or hair is 4 *angulas* and 4 *yavas*, the face is 13 *angulas*, the *gala* is 4 *yavas*, the neck is 3 *angulas*, from the neck to the chest is 13 *angulas* and the same is from the chest to the navel and from the navel to the *medhra*. The thighs and shanks are 26 *angulas* each and the knee and feet are 4 *angulas* each (14.73-77 in Marasinghe 1991, p. 89).

The *Citrakarmashastra* introduces the *adhama dasha tala* (Figure 42) stating that it should be of 116 *angulas* in height (see also Rao's table). The text explains that the head is 4 *angulas*, the face is 12 ½ *angulas*, the neck is 4 *angulas*, from the neck to the navel is 25 *angulas*, from the navel to the *medhra* is 12 ½ *angulas*, the thigh and shanks are 25 *angulas* each. The knee is 4 *angulas* and the foot is 5 *angulas* (14.102-106 in Marasinghe 1991, pp. 95-97). The total length of this image is 117 *angulas* and not 116 as mentioned in the beginning. Marasinghe (1991, p. 96) says that this difference is due to a mistake in the measurement of the feet which should be 4 *angulas* instead of 5. It is difficult to confirm the mistake, especially if we consider the discrepancies that many of the texts present. The following table summarises the *talamana* measurements according to the *Citrakarmashastra*:

**Table VII**  
***Talamana* of the *Citrakarmashastra***

Parts of the body	<i>Adhama dasha tala</i>	<i>Madhyama dasha tala</i>	<i>Uttama dasha tala</i>
Crown or head	4	4 and 4 <i>yavas</i>	4 and 3 <i>yavas</i>
Face	12 and 4 <i>yavas</i>	13	13 and 4 <i>yavas</i>
Gala	-	4 <i>yavas</i>	4 <i>yavas</i>
Neck	4	3	3 and 4 <i>yavas</i>
Torso	25	26	27
Navel to genitals	12 and 4 <i>yavas</i>	13	13 and 4 <i>yavas</i>
Thigh	25	26	27
Knee	4	4	4
Shank	25	26	27
Foot	5	4	4
<b>Total length</b>	117 <i>angulas</i>	120 <i>angulas</i>	124 <i>angulas</i> and 3 <i>yavas</i>



After the descriptions of the *tala* measurements as explained by the texts, we should analyse Rao's table (Figure 31) which appears unreliable in many of its examples. The first problem is given by the third column "Total length of image". The measurements he gives are not to be considered as fixed ones, because in the texts analysed there are differences in the measurements of the same *tala*. This is the case, for example, of the six *tala* measurement in the *Pratima-mana-lakshana* which has a total length of 69 *angulas*, whereas Rao's table states, for the same *tala*, 68 or 72 *angulas*; or the case of the ten *tala* for the *Shukraniti* that has a total length of 114 *angulas* instead of 116 or 120. Moreover, some of the texts show differences in the parts of the body they take into account in the measurement of the *tala*. For example, the measurement of hair is not always present in the *Shukraniti*, or the measurement of the *gala* is stated in the *Citrakarmashastra* only. It is not always possible to fix the measurements as Rao did, but it would be wiser to consider each text separately, so that one can compare the measurements of a text with the other. The following tables highlight the discrepancies between the texts:

**Table VIII**  
**Comparing *sapta tala* measurements**

Parts of the body	<i>Devata-murti-prakarana</i>	<i>Pratima-mana-lakshana</i>	<i>Shukraniti</i>
Hair	3	3	-
Face	12	12	12
Neck	3	3	3
Chest	7 and 4 <i>yavas</i>	19 <i>angulas</i> for the torso	9
Stomach	9		9
Navel to genitals	7 and 4 <i>yavas</i>	2	9
Thigh	18	19	18
Knee	3	3	3
Shank	18	19	18
Ankle	-	1	-
Foot	3	2	3
<b>Total length</b>	84 <i>angulas</i>	83 <i>angulas</i>	84 <i>angulas</i>

**Table IX**  
Comparing *ashta tala* measurements

Parts of the body	<i>Devata-murti-prakarana</i>	<i>Pratima-mana-lakshana</i>	<i>Shukraniti</i>
Hair	3	-	-
Face	12	12	12
Neck	3	-	4
Chest	9	22 <i>angulas</i> for the torso	10
Stomach	12		10
Navel to genitals	9	20	10
Thigh	21	22	21
Knee	3	3	4
Shank	21	20	21
Ankle	-	2	-
Foot	3	-	4
<b>Total length</b>	96 <i>angulas</i>	101 <i>angulas</i>	96 <i>angulas</i>

**Table X**  
Comparing *nava tala* measurements

Parts of the body	<i>Devata-murti-prakarana</i>	<i>Pratima-mana-lakshana</i>	<i>Shukraniti</i>
Hair	3	4	-
Face	12	12	12
Neck	3	4	4
Chest	10	24 <i>angulas</i> for the torso	12
Stomach	12		12
Navel to genitals	12	12	12
Thigh	24	24	24
Knee	4	4	4
Shank	24	24	24
Ankle	-	2	-
Foot	4	4	4
<b>Total length</b>	108 <i>angulas</i>	114 <i>angulas</i>	108 <i>angulas</i>

**Table XI**  
Comparing *dasha tala* measurements

Parts of the body	<i>Adhama-dasha-tala</i> (CKS)	<i>Madhyama-dasha-tala</i> (CKS)	<i>Uttama-dasha-tala</i> (CKS)	<i>Pratima-manalakshana</i>	<i>Shukraniti</i>
Crown or head	4	4 and 4 <i>yavas</i>	4 and 3 <i>yavas</i>	4	-
Face	12 and 4 <i>yavas</i>	13	13 and 4 <i>yavas</i>	12	13
Gala	-	4 <i>yavas</i>	4 <i>yavas</i>	-	-
Neck	4	3	3 and 4 <i>yavas</i>	4	5
Torso	25	26	27	26	23
Navel to genitals	12 and 4 <i>yavas</i>	13	13 and 4 <i>yavas</i>	10	10
Thigh	25	26	27	26	26
Knee	4	4	4	5	5
Shank	25	26	27	26	26
Ankle	-	-	-	3	-
Foot	5	4	4	5	5
<b>Total length</b>	117 <i>angulas</i>	120 <i>angulas</i>	124 <i>angulas</i> and 3 <i>yavas</i>	121 <i>angulas</i>	113 <i>angulas</i>

Rao (1920) maintains that there are mistakes in the whole *tala* system and he claims that the names given by the texts to the various *talas* have no etymological significance. Rao (1920, p. 35) comments on the measurements saying that:

The reader would be inclined to believe that the phrases *dasa-tala*, *pancha-tala* and *ekatala* mean length equal to ten, five and one *tala* respectively, but unfortunately this interpretation does not seem to agree with actual measurements, for example, the total length of an image made according to the *Uttama-dasa-tala* measurement is 124 *angulas*, and the *tala* of this image measures 13 ½ *angulas*; dividing the total length by the length of the *tala* we find that there are only 9 *talas* in it, again, the length of a *chatuṣ-tala* image is 48 *angulas* and its *tala* is 8 *angulas* and therefore there are six *talas* in this set of proportions. Thus it is found that there is no etymological significance clearly visible in the names given to the various proportions.

Rao's view can be explained by the inaccuracies presented in the fourth column of his table of measurement "Length of the face". In all the texts considered in this study, the face of each figure described is to be considered as 12 *angulas*, except for some instances of the *dasha-tala*. Banerjea (1941, p. 360) explains that several iconometric texts record the length of the face being 12 *angulas*; however, the length of the face of

an image of the *uttama dasha tala* variety as laid down in various texts is  $13 \frac{1}{2}$  *angulas*. This means that the measurements of length of the face given in Rao's table are not substantiated by the texts, but have been calculated by Rao himself according to his own interpretation of the system. The *catus tala* image of 48 *angulas* (Figure 38) does not correspond to a six *tala* image, as Rao claims, and its face length cannot be considered as being of 7 or 8 *angulas*, but of 12. In fact, if we divide 48 by twelve, which is the length of the face of a *catus tala* image, the result would be four *talas*. If we consider the *dasha tala*, the *Pratima-mana-lakshana* states that the face of a ten *tala* image is of 12 *angulas* and if we divide 121 *angulas* by twelve, the result would be a little more than ten *talas*. Sometimes the texts give the length of the face as thirteen *angulas* or more, like the *Shukraniti* and the *Citrakarmashastra*, however Rao's suggestion that a ten *tala* image corresponds to a nine *tala* is untenable because each text presents differences in terms of bodily proportions between the two paradigms.

Rao's study on *talamana* is even more confusing if we look at some of his drawings. Figure 43, according to Rao, represents a *panca tala*. The figure however seems disproportionately high to represent such measurement. Ganesha here is 84 *angulas* in height, which means that if we apply the system as explained by the texts, the figure stands for a *sapta tala* ( $84:12=7$ ). The same kind of problem is presented by figure 44. As Rao points out, this figure of a *kinnara* represents a *madhyama tri tala*. Even in this case, if we take the length of the face of the figure as the base for *tala* measurement, this figure appears much taller (roughly a *pancha-tala*) than a *tri tala* figure.

The misinterpretation of Rao seems to be due to the fact of considering the *talamana* system as a system that involves scale, i.e. he reduces or increases the size of an image maintaining the same proportions of its body. In fact if we consider for example the length of the face he gives for the *uttama* and *madhyama catus tala* (Figure 31) we understand that he did not consider the fact that in the *talamana* system the length of the face is not variable and should not be calculated, but it should be of 12 *angulas*. *Talamana* is not about scale, but about the proportions and harmony of the

different parts of the body of a figure. In fact, Sthapati (2002) calls it “rhythmic measure.”

### ***Lambamana* or plumb-line measurement**

*Lambamana* means the measurement taken along the plumb lines and it is one of the six kinds of measurement of images.<sup>10</sup> Among the texts explaining the *lambamana* are the *Manasollasa* and *Shilparatna*, which analyse the system in relation to painting, and the *Citrakarmashastra*, which focuses on sculpture.

The *Shilparatna* of Shri Kumara divides the body of a standing image into parts according to three vertical lines or *sutras*, the *brahma-sutra* which divides the body into two equal parts, and the two *paksha-sutras* or *bahih-sutras* which are six *angulas* apart from the *brahma-sutra* on either side. Furthermore, King Someshvara in his *Manasollasa* (Misra 1982, pp. 109-110) gives details of the three main lines: the *brahma-sutra* starts from the lock of the hair on the crown, passes through the middle of the eye-brows, the tip of the nose, chin, chest and navel to the middle of the two feet. Thus it marks the centre of the body from head to the ground. The *paksha-sutras* begin from the top of the ear, pass through the middle of the knees and the second finger of the foot to the ground.

Along with the three vertical lines, King Someshvara (Man 3.1.205-233 in Shrigondekar 1939, pp. 19-22 and Misra 1982, pp. 110-111) explains horizontal lines or *tiryaka-sutras*, too. They are:

- *mastaka-sutra* or the *sutra* of the head;
- *keshanta-sutra* or *sutra* of the border of the hair which is three *angulas* above the top of the ears;
- *tapanoddasha-sutra* which passes one *angula* above the occiput;
- *kacotsanga-sutra* which passes from the side of the eye-brows, the top of the ear and the occiput;

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<sup>10</sup> See the section “The six types of measurement” in chapter 3.

- *kaninika-sutra* or *sutra* of the pupil of the eye which passes through the outer corner of the eye, the upper end of the *pippali* and above the occiput;
- *nasamadhya-sutra* or *sutra* of the middle of the nose which passes through the raised portion of the cheeks to the middle of the ears;
- *nasagra-sutra* or *sutra* of the tip of the nose which passes through the cheeks, the root of the ear, the region from where the hair starts growing and the back;
- *vaktra-madhyasutra* which passes through the joint of the neck;
- *adharostha-sutra* or *sutra* of the lower and upper lip which passes through the joint of the chin to the back of the neck;
- *hanvagra-sutra* or *sutra* of the end of the jaw which passes through the neck to the joint of the shoulders;
- *hikka-sutra* or *sutra* of the base of the neck which passes through the lower portion of the shoulders and the tops of the hands;<sup>11</sup>
- *vakshasthala-sutra* or *sutra* of the place of the breast which passes through the nipples and the armpits to the back-bone;
- *vibhramasanga-sutra* which passes below the nipples and through the upper parts of the elbow-joints to the middle of the back;
- *jatharamadhyasutra* or *sutra* of the middle of the stomach which passes through the end of the biceps to the back;
- *nabhi-sutra* or the *sutra* of the navel which passes through the waist to the top of the buttocks;
- *pakvashaya-sutra* which passes through the middle of the hips;
- *kancipada-sutra* or *sutra* of the hips which passes through the middle of the buttocks;
- *lingashira-sutra* which passes through the root of the thighs to the curve of the buttocks;
- *lingagra-sutra* which passes from below the buttocks to the fold of the buttocks;
- *uru-sutra* or the *sutra* of the thigh which is eight *angulas* below the *lingagra-sutra*;

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<sup>11</sup> We have to surmise that the text is referring to an image whose arms are outstretched.

- *mana-sutra* or *urumadhya-sutra* which is four *angulas* below the *uru-sutra*;
- *janumurdha-sutra* or *sutra* of the top of the knee which is four *angulas* below the *mana-sutra*;
- *janvadha-sutra* or the *sutra* below the knee which is four *angulas* below the *janumurdha-sutra*;
- *shakrabasti-sutra* which is twelve *angulas* below the *janvadhah-sutra*;
- *nalakantaga-sutra* which passes through the top of the ankle to the top of the heel;
- *gulphanta-sutra* or *sutra* of the end of the ankle which is two *angulas* below the *nalakantaga-sutra*;
- *bhumi-sutra* or *sutra* of the earth which is four *angulas* below the *gulphanta-sutra*.

These *sutras* are explained in relation to *citra*; however some of the *tiryaka-sutras* refers to the front and sometimes they move to the back of the image, like the *vakshasthala-sutra*. This means, again, that this system applies to both sculpture and painting. Figure 45 shows some of these lines. Their names sometimes vary from the ones used in the *Manasollasa*.

The *Citrakarmashastra* differs from the other two texts in the number of vertical lines it mentions. The number of lines of this text is nine; they are a *brahma-sutra* or central line and four *paksha-sutras* on each side of the image (Figure 46). According to the *Citrakarmashastra* a cotton cord should be suspended through the middle of the forehead, through the meeting place of the eyebrows, the tip of the nose, the middle of the navel, the middle of the penis, between the thighs and between the two legs. This is known as the *brahma-sutra* (15.4-5 in Marasinghe 1991, p. 105). One should suspend a second line or *parshva-sutra* (*sutra* of the flank) along the extremity of the face, the *pippali* region,<sup>12</sup> the side of the neck, the edge of the breasts, the end of the hips and the loins and the middle of the feet (15.6 in Marasinghe 1991, p. 105). One should suspend the third line or *karna-sutra* (*sutra* of the hear) along the outer edge of the ear, the

<sup>12</sup> The *pippali* is a short cartilage situated at the entrance to the hole of the ear (see also Marasinghe 1991, p. 201).

middle of the breasts, the middle of the thighs and the legs, the outer limit of the leg bone and the edge of the fourth toe (15.7 in Marasinghe 1991, p. 105). One should suspend the fourth line or *kaksha-sutra* (*sutra* of the armpit) through the arm-pit, outside the hips, outside the root of the thigh, along the side of the knee and of the little toe and along the side of the arm (15-8 in Marasinghe 1991, p. 105). The fifth line or *bahu-sutra* (*sutra* of the arm) should be suspended along the middle of the arm and the end of the hand. One should thus lay the nine lines vertically (15.9a in Marasinghe 1991, p. 107). The text mentions also plumb-lines to be suspended at the back for sculptures (see 15.9b-11 in Marasinghe 1991, p. 107). The *Citrakarmashastra* explains that the suspension of plumbs is done from a supporting frame hanging from pegs. One should suspend the different *sutras* dividing the respective parts of the body (15.12 in Marasinghe 1991, p. 107).

The role of these *sutras* seems to be that of giving symmetry to the figures to be painted or sculpted. The *lambamana* as explained by the *Citrakarmashastra* presents a practical use of the system by the use of a cotton cord to be applied in the measurement of the limbs and for symmetry. The same cannot be said for the other two texts which focus more on a description of the lines that should be imagined by the reader. The use of this kind of visual images is a peculiar characteristic of the theoretical knowledge expounded by the *citrasutras*. In spite of this, Sivaramamurti interprets the rules of the *citrasutras* to the letter as if these injunctions had a practical valence (Figure 47). However, in the practice of painting and sculpture not only are standing men represented, but also images of women, movements of the body, hands and legs. In this case, too, the intention is to invite the reader or practitioner to derive all the possible combinations from the theoretical knowledge expounded.

## Conclusions

*Talamana* and *lambamana* are analysed in this chapter as two separate entities, but they complete the theory of proportion delineated in the previous chapter and they should be seen in the wider framework of the system of measurement and proportion. They are



concerned with both painting and sculpture, hence there is no tenable theoretical boundary between the two arts. Furthermore, they both focus on the image of a man stereotype. In this sense the theory of proportion remains somewhat abstracted from practice. This permits one to modify it according to one's own discretion and need. The theory explained in this chapter draws from a different range of texts. Each text contains a different interpretation of *talamana* and *lambamana* and only by comparing the different views can the significance of the two systems be understood.

The absence of references to physiognomy in the exposition of the theories of *talamana* and *lambamana* contrasts with what we discovered in the previous chapter. It seems that physiognomy, which was closely interlinked with the theory of proportion of the early texts, loses its importance, and that the texts instead begin to divert their focus to a more technical way of calculation of bodily proportions and symmetry. Furthermore, the texts describe the theories of *talamana* and *lambamana* more concisely compared to much of the theory analysed in the previous chapter. This 'scientific' approach to theorising can be seen in the following chapter in the section on postures.

Rao (1920) was the first to analyse *talamana* systematically but, as we have seen, he misinterpreted some fundamental aspects of the theory, considering for example the length of the face of an image as a variable measurement. *Talamana* is rather a system of measuring the length of the body of an image, in which the basic unit of measurement should always be of 12 *angulas*. This basic unit (excluding some exceptions for the ten *tala* measurement) corresponds to the length of the face of the image. Even if this is the essential rule to understand *talamana*, texts reveal numerous discrepancies between the measurements of the *talas*, which are highlighted by the comparison tables (VIII-XI). Also in this case, the discrepancies can be interpreted as different ways of perceiving the proportions of a body (see chapter 3).

Other discrepancies between texts can be seen in the *tala* hierarchy of figures. For example, the *pishacas* are seven *talas* in the *Citrakarmashastra* and thirteen *talas* in the *Devata-murti-prakarana*. These different hierarchies should not be seen as an order of importance of the figures, as Dagens (Baumer (ed.) 1992, p. 154) has pointed out, but simply as an iconographical characteristic of the figures. This is because we cannot

consider a *pishaca* to be more important than a god. We can simply deduce that a thirteen *talas pishaca* would be scarier than a seven *talas* one.

The *talamana* system of measurement, which has been considered in secondary literature as belonging to the theory of sculpture, is used by the painters of Nathdvara (Rajasthan). In this pilgrimage centre, there is a community of painters whose main activity is producing images of Shri Nathji, a form of Krishna as a child (Figure 48). Many of these painters agree that the right measurement for Shri Nathji is five and a half *talas*. One of the painters, Ghanshyam Sharma, clearly shows the division of the image into five and a half parts using a compass (Figure 49). Once the basic *tala* unit is determined, the compass will help him to maintain the same measurement and to achieve the desired proportion of five and a half *talas*. This rule, however, is not followed by all the artists. Another painter, Sukhlal Jangid, admits that even if there is a fixed length for the god of five and a half *talas*, this measurement is not followed by all artists and the images of the god can vary for example from four and a half, five and also six *talas*.

Another painter, Chiranjeev Lal Sharma, while accepting the measurement of length of five and a half *talas*, claims to use a different way to achieve the same measurement. He explains that the image of Shri Nathji kept in the *haveli* temple of Nathdvara stands on a rectangular stele that measures 5x3 feet. In his painting, he draws a rectangle with the same kind of proportions, for example a 5x3 inches rectangle (Figure 50), then he divides the length of the rectangle into 6 parts, leaving the final portion for the ground. The image of Shri Nathji should then fit the rectangle as can be seen in his sketch.

Another view on *talamana* is that of Harihar Moharana, the sculptor from Bhubanesavar. He sustains that for human beings, Shiva and some goddesses like Lakshmi and Parvati the right measurement is seven and a half *talas*. These should be distributed as follows: one *tala* for the face, leaving out the hair, half a *tala* for the neck, two for the body, two up to the knee and two up to the feet. He also explains that four and a half *talas* is the right measurement for babies, and four is for Ganesha, in which one *tala* is the head and three *talas* his body.

Other examples of the use of *talamana* are given by Ram Prasad Sharma, the sculptor from Jaipur. In his point of view, standing images, like that of Sai Baba of Sirdi are seven and a half *talas*. This length becomes five *talas* for sitting images. Similarly, Pramod Sharma, another sculptor from Jaipur, says that standing images are seven and a half, but sitting ones are four *talas*.

The other system analysed in this chapter is *lambamana*, whose aim is that of creating symmetry of an image. Symmetry is achieved by dividing the body of images with plumb-lines (*lamba*) called *brahma-sutra* and *paksha-sutras*. The body can also be divided with horizontal lines or *tiryakasutras*. Symmetry is regarded as one of the fundamental points of the Indian theory of painting and sculpture, and practitioners consider this point very seriously. For many of them, the first step in organising a painting or a sculpture is that of dividing a piece of paper, board or stone into two equal parts. Harihar Moharana, for example, elucidates that the use of the central line (*brahma-sutra*) is the most important thing to follow in order to obtain balance. He also adds that there are other important lines to be used and they depend on the postures of the images.

In painting, the *brahma-sutra* is used dividing into two equal parts a piece of paper. That line will become the central line of the main figure. This is the case of the image of Shri Nathji shown in figure 48. In the image of Shri Nathji there are also horizontal lines to be followed that are important in his iconography. For example, Sukhlal Jangid sustains that Shri Nathji should have an earring on the top of his ear, and this should be on the same level of the elbow of his raised arm. The other arm should be at the same level of the *nabhi* or navel. These two ideal lines can be *seen* in figure 48.

The use of vertical and horizontal lines can be seen also in the fresco painting dated to the mid nineteenth century representing Shri Nathji in the Mahuavala Akhara in Nathdvara<sup>13</sup> (Figure 51). In this fresco, vertical and horizontal lines are used to organise the entire composition and to highlight the centrality of Shri Nathji.

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<sup>13</sup> Mahuavala Akhara is an historical building of Nathdvara famous for its frescos. It was built under the patronage of Damodarji II (1797-1826). According to Ambalal (1995) it was painted by an artist named Eklingji.

Also Kalamani Venkatesaraja, a traditional painter based in Tanjore, confirms the importance of the *brahma-sutra*, showing an uncompleted work made by his father (Figure 52). This work shows that the use of a main central line that divides the wooden board into two parts, becomes the central line for the main deity, and that other deities, on the right and left of the main one, have their own central lines. This work also reveals the use of horizontal lines. This artist however admits that today he doesn't employ any of these lines for his painting, but more simply he utilises a series of pricked drawings, that are reported on a wooden panel with the use of coal (Figure 53).

As in chapter 3, this chapter highlights that it is possible to see a link between the theory and practice of painting. This is proved by the various examples and ideas of different painters and sculptors, who, while denying any use or knowledge of the texts, employ the same way of reasoning, conceptualising and dividing images expressed by the *citrasutras*. Extant paintings too may be used as a proof of such a link, like in the case of the fresco representing Shri Nathji in the Mahuavala Akhara, in which *lambamana* is used to create symmetry and balance of the entire composition.

## Chapter 5

### Stances, Hand and Leg Postures

This chapter examines the different positions of the body, hands and legs of an image as described in various textual sources. The first part of this chapter will focus on stances or *sthanas*. The different positions of the body will be analysed according to two main systems, one delineated by the *Vishnudharmottara* and the other by the *Shilparatna*. The second part will consider different *mudras* or positions of the hands and the meanings conveyed by these positions to the viewer. The main textual sources used in this section are the *Samarangana Sutradhara*, the *Natya Shastra*<sup>1</sup> and the *Vastusutra Upanishad*.<sup>2</sup> The third part of the chapter will focus on *pada mudras*<sup>3</sup> or leg postures of standing images according to the *Samarangana Sutradhara*, *Natya Shastra* and *Vishnudharmottara*, and the fourth part on *asanas* or sitting postures according to the *Vastusutra Upanishad*.

Studies of the theory of painting discuss the topic of stances in line with the textual evidence provided by the *Vishnudharmottara*, *Shilparatna* and other texts, but do not generally consider *mudras*, *pada mudras* and *asanas* which, due to their different textual sources, are only included in studies on the theory of sculpture. As argued in previous chapters, it is important to examine both the theory of painting and the theory

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<sup>1</sup> The *Natya Shastra* is a compendium on theatre and dance. It is usually dated not later than the 6<sup>th</sup> century. It is roughly contemporaneous with the great flourishing of dramatic and other literatures under the patronage of the Gupta kings (4<sup>th</sup>-6<sup>th</sup> centuries) (Gerow 1977, p. 245).

<sup>2</sup> The *Vastusutra Upanishad* is a text on image making attributed to the sage Pippalada. The edition compiled and translated by Boner (1982) is based on four copies of the text written on palm-leaf in Oriya and Devanagari scripts. This text is divided into six parts and deals with the knowledge of stones (*shaila*), compositional diagram (*khilapanjara*), carving of stones (*shaila-bhedana*), disposition of the limbs (*angaprayoga*), determination of the character (*bhavananyasa*) and final integration of all the forms (*sambandha-prabodhana*).

<sup>3</sup> In the texts, the position of the body and that of the feet are both named with the same term *sthana*. In order to avoid confusion with the postures of the body explained in the first part of this chapter and the posture of the feet, the word *pada mudra* will be used to designate the latter, following the example of Shukla (1956).

of sculpture together, as both help us to understand the *citrasutras* and the actual practice of Indian painting. Our analysis here, however, does not seek to comprehensively examine all *mudras*, *pada mudras* and *asanas*, but seeks to enumerate only some of the most important ones to highlight the difficulties of interpreting their meaning and application. Indeed, the texts examined here only mention *mudras*, *pada mudras* and *asanas* and do not provide much explanation about their aesthetic representation in the absence of drawings. Thus, to understand the descriptions of these positions, it is necessary to draw on secondary literature, especially the works of Rao (1914), Banerjea (1941) and Sthapati (2002). By integrating the analysis and interpretations of this secondary literature it is possible to comprehend, albeit still only to a limited extent, the aesthetic representations of those postures. However, as our use of the various textual sources and secondary material will demonstrate, there is significant divergence among scholars' interpretations. Rao, Banerjea and Sthapati all claim to make their deductions on the basis of textual sources, yet their assertions are rarely supported by citations of textual evidence. Indeed, it often appears that their claims are grounded more in observation and interpretative speculation about extant sculptures rather than analysis of textual sources.

### Stances

This section examines the theory of stances according to two main systems: the one of the *Vishnudharmottara* and the other of the *Shilparatna* and *Manasollasa*. The *Vishnudharmottara* appears to be less systematic and clear than the *Shilparatna* and *Manasollasa* in the analysis of the system of stances, and the information it gives seems to be not enough for the reader to grasp some of the postures. For this reason it becomes necessary to study all the available texts together in order to understand the system.

The key word that analyses the system of stances expounded in the *Vishnudharmottara* is *kshayavrdhi*, from *kshaya* (diminishing) and *vrddhi* (increasing). This term is generally translated in secondary literature as foreshortening, even if the

expression acquires a different meaning from its English equivalent. Jayanta Chakrabarti (1980, p. 103) misinterprets *kshayavridhi*, explaining it as a principle used by the painters to make figures smaller or larger according to their relative importance in the composition. This system however is not supposed to be used for this purpose, but it should be employed to depict figures in different poses. *Kshayavridhi* refers to the rotation of the body of a man about an axis and to what a viewer standing in a fixed point can see of that body. On this rotation the viewer will see some parts of the body disappear (*kshaya*) or appear (*vrddhi*). In the same way, the reader should imagine the body divided into two equal parts of which the foreshortened part (*kshaya*) of a body would disappear while rotating and the other part (*vrddhi*) would appear (Figure 54). The *Vishnudharmottara* states that figures have nine postures. They are: *rjvagata*, *ardharju*, *sacikṛta*, *adhyardhalocana*, *parshvagata*, *paravṛtta*, *prsthagata*, *purovṛtta*, *samanata*. The text adds that these postures have innumerable variations (ViDha 39.1-4 in Dave Mukherji 2001, pp. 78-79).

In the description of stances, the *Shilparatna* and the *Manasollasa* explain the system in a different way from that of the *Vishnudharmottara*, using the *lambamana* or plumb-line system, dividing the body vertically into parts by means of three perpendiculars (Figure 55). Also in this case we should imagine a male body rotating in front of a viewer standing in a fixed position. The texts carefully describe for each position where the plumb-lines pass through the body.

According to the *Manasollasa* (Man 3.1.179-192 in Shrigondekar 1939, pp. 17-18) and *Shilparatna* (Bhattacharya 1976, p. 125) there are five principal stances. They are: *rju*, *ardharju*, *saci* or *sacika*, *ardhakshi* or *dvyardhakshi* and *bhittika*. The respective names of the five main stances or *sthanas* mentioned by the two texts are almost identical and it is not unlikely that both texts followed a common tradition. The *Shilparatna* (SR 46.63) further explains that in addition to these five *sthanas* there are four types of *paravṛtta* or dorsal *sthanas* which bring the total of the stances to nine, like the *Vishnudharmottara*.

Bhattacharya (1976, pp. 124-125) states that the available version of the *Samarangana Sutradhara* is extremely corrupt and that it is almost impossible to arrive at any conclusion on the basis of chapter 79 of the text which deals with the principles of stances. However, following the analysis of Shukla (1956, pp. 244-245) we can say that the *Samarangana Sutradhara* (79) divides postures or *sthana* into three parts: the first group is the one including postures which show the frontal part of the body, and are 5 in total: *rjvagata*, *ardharjvagata*, *sacikrta*, *adhyardaksha* and *parshvagata*. The second group includes the posture showing the back of the body and they are called *paravrtta* or turned back stances and they are four in number. The third group includes the postures occupying an intermediate position (*vyantara*) and they are 20 in number.

The stances can be summarised as follows:

**Table XII**  
**Stances**

Texts	Stances
<i>Vishnudharmottara</i>	<i>rjvagata</i> (frontal), <i>ardharju</i> (half-frontal), <i>sacikrta</i> (averted), <i>adhyardhavilocana</i> (half-eyed), <i>parshvagata</i> (profile), <i>paravrtta</i> (turned away), <i>prsthagata</i> , <i>purovrtta</i> , <i>samanata</i> (completely bent)
<i>Shilparatna</i>	<i>rju</i> (frontal), <i>ardharju</i> (half-frontal), <i>saci</i> (averted), <i>ardhakshi</i> (half-eyed), <i>bhittika</i> (profile), 4 unnamed <i>paravrtta</i> or dorsal stances
<i>Samarangana Sutradhara</i>	<i>rjvagata</i> (frontal), <i>ardharjvagata</i> (half-frontal), <i>sacikrta</i> (averted), <i>adhyardhaksha</i> (half-eyed), <i>parshvagata</i> (profile), 4 unnamed <i>paravrtta</i> or dorsal stances and 20 <i>vyantara</i> or intermediate stances

The texts give more emphasis to the description of the frontal stances represented in figures 54 and 55. The first stance to be discussed by the texts is the *rjvagata* or frontal. The *Vishnudharmottara* explains that this figure is fully complete with beautiful limbs and is sketched very smoothly and faultlessly. This posture is pure and appealing, because the body is unforeshortened (ViDha 39.5-6 in Dave Mukherji 2001, pp. 78-81).



In the *Shilparatna*, the *rju sthana* or frontal stance is when the frontal part of the body is shown. Here the distance between the *brahma-sutra* and the two side lines or *paksha-sutras* is of six *angulas* (Figure 55). In this figure the width of the ears, nostrils and temples should be one *angula* in each case. The width of the feet is 4 *angulas* each and their fingers should be shown proportionately. In this stance the back is not shown (SR 61-68 in Bhattacharya 1974, pp. 48-50).

The *Vishnudharmottara* explains that *ardharju* or half-frontal stance has half of the face, chest, belly, waist down to the buttocks and thigh foreshortened. One fourth of the nose-wing and lips are foreshortened; as for the rest of the body, a third part is foreshortened. A figure in this posture is drawn employing perpendiculars<sup>4</sup> passing through the nipples; and various coordinations of hand and foot movements are possible (ViDha 39.7-9 in Dave Mukherji 2001, pp. 80-81). The *Shilparatna* states that in the *ardharju* (half-frontal) stance the inter-spaces between the *brahma-sutra* and the two *paksha-sutras* are of 8 *angulas* on one side and 4 *angulas* on the other (Figure 55). One of the *paksha-sutras* would run from the side of the eye, the ear lobe, inside the breast, cutting one-third of the knee and touching the end of the shank, and should be imagined as meeting the ground at the root of the large toe of the other leg. The other *paksha-sutra* should run outside the nipple and 5 *angulas* from the knee, and should touch the ground between the middle and the fourth toe of the front leg. The *brahma-sutra* passes from the middle of forehead, through the middle of the brows, a little outside the nostril and outside the pit of the navel, it goes to the middle part of the genitals. In the latter part it meets the ankle of the foot of the back leg. All other limbs should be arranged appropriately (SR 69-76 in Bhattacharya 1974, p. 50).

The *Vishnudharmottara* states that *sacikṛta* or averted stance has half of the body foreshortened to one fourth, and one and a half side of the nose and forehead are shown. The foreshortened eye measures one *angula* and the same measurement is for the foreshortened eyebrow (ViDha 39.10-13b in Dave Mukherji 2001, pp. 80-83). The

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<sup>4</sup> The use of the word *lamba* or perpendicular shows that the use of plumb-lines to explain postures, as used in the *Shilparatna* and *Manasollasa*, was known to the writer of the *Vishnudharmottara*.

*Shilparatna* explains that in the representation of the *sacika* (averted) stance, the inter-spaces between the *brahma-sutra* and the *paksha-sutras* are 10 *angulas* on one side and 2 *angulas* on the other (Figure 55). One of the *paksha-sutras* should touch the forehead, the corners of the eye, the cheek, the shoulder-blade and should pass through a distance of one *angula* from the breast and one and a half *angula* away from the navel, and clearly outside the joint of the thigh and the *anidesha*.<sup>5</sup> The *paksha-sutra* touches the root of the great toe of the other leg. The *brahma-sutra* should be placed successively through the hair parting, the middle of the brows, the middle of the nostrils and through the middle of the navel, outside the genitals, before the circle of the knee and the tip of the toenail. The other *paksha-sutra* should pass from the back of the head, near the ear, the neck, the cavity of the joint of the shoulders, the nipple, at a distance of 1 *angula* in front of the waist and running at a distance of 2 *angulas* from the centre of the hip and also that of the wrist, and it goes down to the back of the heel of the front leg (SR 76b-85a in Bhattacharya 1974, pp. 50-51).

The *Vishmudharmottara* states that *adhyardhalocana* (one-and-a-half-eyed), also called *adhyardhaksha* or *chayagata* is represented with half an eye and eyebrow foreshortened. Its forehead on the foreshortened side is half an *angula* and only half of the nose is visible. It has one side of one cheek measuring half an *angula* and one entire side foreshortened. The region of the throat, on the foreshortened half of the body, measures half an *angula* and that of the chin measures a *yava*. The front of the chest is foreshortened by half, and one *angula* remains of the foreshortened side of the navel. One and a half of the unforeshortened waist is visible and the other half becomes invisible (ViDha 39.13c-16 in Dave Mukherji 2001, pp. 82-85). According to the *Shilparatna*, in the *dvyardhakshi* or “half-eye” stance, the inter-space between the *brahma-sutra* and the *paksha-sutras* is 1 *angula* on one side and 11 *angulas* on the other (Figure 55). One side line should pass along the scalp (*keshanta*), the tip of the nose, the armpit, the navel and the middle of the knee and the root of the great toe. The *brahma-sutra* should pass

<sup>5</sup> Bhattacharya (1974, p. 62) explains that according to Gopinath Rao *anidesha* indicates the part of the leg just above the knee.

through the middle of the hair parting, the middle of the brows, the *goji*<sup>6</sup> and the jaws, and should run at a distance of 1 *angula* from the armpit, the navel, the genitals and reach the base of the last but one division of the great toe. The other *paksha-sutra* passes along the upper region of the back of the body, the wrist, the index finger and the heel of the front leg (SR 85b-91 in Bhattacharya 1974, pp. 51-52).

The *Vishnudharmottara* explains that *parshvagata* or profile, called also *bhittika*, is the posture in which only one side can be seen, either left or right side. The entire other side undergoes foreshortening and along with it disappears the symmetry of the body. It has one eye, one eyebrow, half of the nose and forehead, one ear, half the distance between the eyebrows, half the chin and hairline (ViDha 39.17c-20b in Dave Mukherji 2001, pp. 84-85). The *Shilparatna* states that in the *bhittika* or *parshvagata* or profile stance there are two *paksha-sutras* and the *brahma-sutra* would coincide with one of the side lines (Figure 55). One of the *paksha-sutras* passes through the upper region of the backside of the body, the shoulder blade, the elbow and close to the end of the heel. From the *brahma-sutra*, the distance of the scalp should be 3 *yavas* and the distance of the root of the nose would be 2 *yavas*. The distance between the *goji* and the central line should be imagined as of 1 *yava*. The distance between the *brahma-sutra* and the chin would be 1 *angula*. The distance of the joint of the neck and that of the throat from the central line should be 1 *angula* and one *bhaga* respectively. The *brahma-sutra* would then pass along the nipple and the genitals (SR 91b-107 in Bhattacharya 1974, pp. 53-54).

The back postures are described in detail only by the *Vishnudharmottara*. The *Shilparatna* only states that there are four postures which have the front part of the body “within the wall” (*bhittika*). This expression indicates that these postures show the back or *parabhaga* view of the body and the frontal part is invisible because it is turned to the side of the wall, i.e. embedded in the stone surface (SR 108-112 in Bhattacharya 1974, p. 54).

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<sup>6</sup> *Goji* means the cavity of the upper lip just below the nose (Bhattacharya 1974, p. 62).

The *paravrtta* (turned away) posture, also named *gandaparavrtta* (averted by the cheek), is the sixth posture mentioned by the *Vishnudharmottara*. In this posture one corner of the eye measures one *angula* and the throat region measures the same. The chin, the cheek and the forehead are foreshortened by one *angula*. Arm, chest, waist and buttocks right down to the ankle are foreshortened in the appropriate places by 4 *kalas*. The foreshortening should be done in terms of correct proportion so as not to make the body of the figure look too angular (ViDha 39.20c-23b in Dave Mukherji 2001, pp. 86-87).

*Prshthagata* has the body shown from the back. The corner of the eye is shown slightly but the cheeks and the stomach are not. This posture is very stable, beautiful to look at; its loveliness is not devoid of proportion and is full of qualities such as sweetness (ViDha 39.23c-26b in Dave Mukherji 2001, pp. 86-87).

The *purovrtta* posture has half of the body foreshortened to 3 *angulas*. It is somewhat like *adhyardhalocana* in appearance seen from behind (ViDha 39.26c-27 in Dave Mukherji 2001, pp. 88-89).

The *samanata* posture (completely bent) has the buttocks and the soles of the feet fully visible. The waist is visible from the back and the toes and the front part of the soles are foreshortened. The elbows are also visible on either side. This posture is beautifully accomplished from all sides, with only the upper part of the arm made visible and the face and the shoulders invisible (ViDha 39.29c-32b in Dave Mukherji 2001, pp. 88-91).

The *Shilparatna* explains that there may be numerous stances of mixed poses (*mishra sthanas*) like for example when the face is in *rju* stance, the lower part from the neck may be of another stance and the pose of the lower part from the girdle may be of another. The skilled artist decides upon an appropriate stance and delineates mood and action in painting (SR 108-112 in Bhattacharya 1974, p. 54). Also the *Vishnudharmottara* clarifies that postures can have many more variations, and according to the criterion of variety of postures there could be *uttama* (best), *madhyama* (middling) and *adhama* (inferior) types of postures. Postures are also classifiable into variegated

(*citra*), hyper-variegated (*vicitra*) and variety-less (*advaidha*) (ViDha 39.37 in Dave Mukherji 2001, pp. 92-93).

### ***Mudras***

The study of *mudras* (also called *hasta*: hand) is permeated by the idea that hand postures in painting and sculpture derive directly from dance. Sthapati (2002, p. 81), for example, observes that: "One of the most significant features of the sculptural tradition of this land is the adaptation of the grammar of dance in sculptural representations." This established viewpoint, however, appears difficult to demonstrate in practice. It seems more appropriate to state that while dance and painting/sculpture share many similarities, they have developed their own peculiar language of visual representation.

Nevertheless, certain connections between painting and dance can be examined in texts such as the *Natya Shastra*. In fact, theoretically speaking, the *Natya Shastra* becomes one of the most relevant texts in the study of *mudras* and of *pada mudras*. The *Vishnudharmottara* (III.2.1-9) establishes this textual connection by specifying that what is not explained in the chapters on *citra* should be understood from the chapters on dance. The theoretical relationship between dance and painting/sculpture, may be also proved by the similarities between the *Natya Shastra* (9) and the *Samarangana Sutradhara* (83), a *shilpa* text that contains a chapter on hand postures that seems to derive directly, except for few modifications, from the *Natya Shastra* itself. For example, in the *Samarangana Sutradhara*, *mudras* are divided into three types (*asamyuta*, *samyuta*, and *nrtya hastas*), according to the system delineated by the *Natya Shastra*.

According to the *Samarangana Sutradhara* (83), there are 24 *asamyuta* (non-combined) *mudras*, in which only one hand is used. These are: *pataka*, *tripataka*, *kartarimukha*, *ardhacandra*, *arala*, *shuka tunda*, *mushti*, *shikhara*, *kapittha*, *khatakamukha*, *suci mukha*, *padmakosha*, *sarpashira*, *mrgashirsha*, *kangula*, *alapadma*, *catura*, *bhramara*, *hamsavaktra*, *hamsapaksha*, *sandamsha*, *mukula*, *urnanabha* and *tamracuda*.

The *Samarangana Sutradhara* (83) states that the *samyuta* (combined) *mudras*, in which both hands are used, are 12 in number.<sup>7</sup> They are: *anjali*, *kapota*, *karkata*, *svastika*, *khataka*, *utsanga*, *dola*, *pushpaputa*, *makara*, *gajadanta*, *avahittha* and *vardhamana*.

The *nrtya* (dance) *mudras* according to the *Samarangana Sutradhara* (83) are: *caturashra*, *viprakirna*, *padmakosha*, *aralakhatakamukha*, *aviddhavakraka*, *sucimukha*, *recitahasta*, *uttanavancita*, *ardharecita*, *pallava*, *keshabandha*, *lata hasta*, *kati hasta*, *paksha vancitaka*, *paksha pracyotaka*, *garuda paksha*, *danda paksha*, *urdhva mandali*, *parshva mandali* and *urahparshvardha mandali*.<sup>8</sup>

This list however seems to bear little significance for the practice of sculpture and painting. Apparently the connection between the *mudras* explained in the *Samarangana Sutradhara* and *Natya Shastra*, and those used practically in the art of painting or sculpture remains on a purely theoretical level, excluding some exceptions like *suci* and *anjali mudras*, which can be clearly recognised in practice. On the practical level it is difficult to see how the list of *mudras* had any relevance for painting and sculpture. This question is considered seriously by Banerjea (1941, p. 270) who highlights that: "The fully developed and highly technical *mudras*, that are described in the Indian works on dramaturgy such as *Natyasastra*, *Abhinayadarpana*, etc. have not much application in our study." His view however, differs from our reading of the texts. The *Natya Shastra* and the *Samarangana Sutradhara*, enumerate possibilities in which a work of art may unfold, in a manner similar to how other aspects and concepts of the theory are expounded. These concepts may or may not be used in practice.

Along with the *Samarangana Sutradhara* and the *Natya Shastra* there is another text that enumerates hand postures in relation to sculpture, and by implication to painting: the *Vastusutra Upanishad*. The *Vastusutra Upainshad* (6.16 and commentary in Boner 1982, p. 84) explains that hand gestures manifest the emotional attitude of the

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<sup>7</sup> The *Natya Shastra* mentions 13 *samyuta mudras*. The posture omitted in the *Samarangana Sutradhara* is *nishadha*.

image and that there is a connection between gestures of chanting priests in sacrificial rituals and gestures used in the representation of divine figures. The same text (6.4 in Boner 1982, p. 79) adds that *mudra* is one of the elements constituting an image, and that the other elements are: composition, ornamentation, weapons, postures, vehicles, secondary divinities and devotees. The five principal gestures mentioned by the text are: *tarjani*, *vara*, *abhaya*, *yoga* and *vyakhyana*. The same *mudras* are mentioned in the chapters on iconography included in the various *pratimalakshana* sections of the *shilpa* texts, in which the detailed descriptions of gods contain a very limited range of names for hand postures, but they can be recognised in practice. The *Vastusutra Upanishad* and the other texts do not mention the aesthetic features of the *mudras*. This is due to the fact that those *mudras* were well known in the contexts in which they were written. In order to describe and identify them here, we must draw upon secondary literature. In many cases the explanation of *mudras* are clear, but in some others (e.g. *yoga* and *katata mudras*) scholars remain divided over interpreting them.

The *tarjani* (threatening finger) *mudra* (Figure 56) has the projected forefinger pointing upwards. The *Devata-murti-prakarana* (4.43) prescribes that the *dvarapala* (doorkeeper) Dandi is represented with a raised finger in *tarjani mudra*. This *mudra* denotes retribution and it is considered a variation of *suci mudra* (Figure 57) which is used to point out or draw attention to any occurrence (Rao 1914, p. 15; Sthapati 2002, pp. 86-87). The *Natya Shastra* (9.64-79) describes the *suci mudra* extensively. In this posture the index finger is stretched. The text elucidates that the index finger can be raised, bent, kept shaking, oscillating, expanded, lifted up and tremulous, and according to how it is kept the posture has a different meaning (*The Natya Sastra of Bharatamuni* 2000, pp. 137-139).

Rao (1914, p. 14) explains that the *varada* or *vara* (conferring a boon) *mudra* (Figure 58) shows the pose of the hand while conferring a boon. In this pose the palm of the left hand is spread outwards with the fingers pointing downwards. Varahamihira

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<sup>8</sup> The *Natya Shastra* has a longer list of *nrtya hastas*. There are, for example, *udvrtta*, *talamukha*, *svastika*, *nitamba*, *mushtikasvatika*, *nalini padmakosha*, *alapallava*, *ulbana*, *lalita* and *valita*.

while describing the image of Ekanamsha says that one of her right hands is to be shown in the *varada* pose (BrSam 58.38 in Bhat 1981, p. 558). The *varada mudra* is the hand pose prescribed in the *Devata-murti-prakarana* (4) for gods like Vishvakarma, Candra, Budha, Indra, Varuna and Vayu (Vinaysagar 1999, pp. 75-101).

*Abhaya* (fearless) *mudra* (Figure 59) means the protection-affording hand pose. Here the palm of the hand, with the fingers pointing upwards, is exposed as if engaged in enquiring about the welfare of the visitor (Rao 1914, pp. 14-15). Banerjea (1941, p. 273) maintains that *abhaya mudra* is also called *shantida* (giving tranquillity). The latter term has been used in the *Brhat Samhita* by Varahamihira in his description of the two, four and eight armed images of Vishnu (BrSam 58.33-35 in Bhat 1981, p. 557). This hand pose is recommended by the *Devata-murti-prakarana* (7) for images like those of Mahayaksha, Trimukha Yaksha, Syama and Shanta (Vinaysagar 1999, pp. 204-233). According to Sthapati (2002, p. 84) this *mudra* represents the *pataka* (banner) *mudra* of the *Natya Shastra* (9.18). *Abhaya mudra* is also one of the poses associated with Buddhist iconography. Other *mudras* are *dharmacakra* (wheel of dharma) (Figure 60) and *bhumisparsha* (touching the earth) *mudras* (Figure 61).<sup>9</sup>

Some confusion arises in the interpretation of *yoga mudra*. Rao (1914, p. 17) sustains that in the *yoga mudra* the palm of the right hand is placed in that of the left hand and both together are laid on the crossed legs of the seated image (Figure 62). Sthapati (2002, p. 91) and Marasinghe (1991) (Figure 63 and 64) call this *mudra* by the name *dhyana* (meditation). The *yoga mudra*, according to Sthapati (2002, pp. 85-86) is represented by a different position of the hands. For this scholar, *yoga mudra* is a variety of *vyakhyana mudra*.

In *vyakhyana* (explaining) *mudra* (Figure 65), the tip of the thumb and that of the forefinger touch each other, so as to form a circle and the other fingers are kept open. This is the *mudra* adopted when an explanation or exposition is being given, hence it is

<sup>9</sup> The *dharmacakra mudra* is the hand posture in which Buddha is portrayed while turning the wheel of *dharma*. In *bhumisparsha* pose the left hand rests on the lap with palm outward and the right one touches the earth. This *mudra* is used to represent the Buddha when citing the earth as a witness to his defeat of Mara during the night in which he attained the *bodhi* (enlightenment).



also called *cin* (reflecting) *mudra*, *sandarshana* (showing) *mudra* and *vitarka* (conjecture) *mudra* (Rao 1914, pp. 16-17; Sthapati 2002, pp. 85-86). Another variety of this posture is *jnana* (higher knowledge) *mudra*. According to Rao (1914, p. 17), in the *jnana mudra* (Figure 66) the tip of the middle finger and that of the thumb are joined together and held near the heart, with the palm of the hand turned towards the heart. Sthapati (2002, p. 86) explains that this *mudra* can also be expressed with the palms facing upwards and resting on both knees.

Rao, Banerjea and Sthapati enumerate a number of other *mudras* to be added to those of the *Vastusutra Upanishad*, but unfortunately they omit to mention the textual sources used. Among them are for example *anjali mudra*, which is also mentioned by the *Devata-murti-prakarana* and *Natya Shastra*, and *kataka mudra*, which presents some significant problems of interpretation.

In the *anjali* (honouring) *mudra* (Figure 67) the palms of the hands are kept close to each other and the folded hands are made to rest on the chest. This hand pose is indicative of worship and prayer (Rao 1914, p. 16) and even today in Indian society making this gesture denotes respect. Banerjea (1941, p. 274) maintains that this hand pose is also called *vandani* (reverence) or *namaskara* (adoration) *mudra*. According to the *Devata-murti-prakarana* (5.67) the image of Garuda has two hands in the *anjali* position (Vinaysagar 1999, p. 125). The *Natya Shastra* (9.127-128) explains this posture saying that it is composed by two *pataka* (banner) hands put together. It further enjoins that the *anjali mudra* is employed to greet friends, receive venerable persons and mark one's obeisance to deities. In regard to the deities *anjali* is held on the head, to venerable persons near one's face, and in greeting friends *anjali* is placed on the breast (*The Natya Sastra of Bharatamuni* 2000, pp. 133,143).

The explanation of *kataka mudra* presents some discrepancies between secondary literature and the texts. Rao (1914) and Banerjea (1941) sustain that *kataka* or *simha karna* (lion's ear) *mudra* (Figure 68 and 69) is that pose of the hand in which the tips of the fingers are loosely applied to the thumb so as to form a ring or to resemble a lion's ear. Rao (1914, p. 15) maintains that the hands of goddesses are generally fashioned in

this manner for the purpose of inserting a flower in them. On the other hand, Sthapati (2002, p. 85) explains that the name *kataka* derives from the position of the hand that resembles a crab. It is worth noting that the descriptions of this *mudra* are different from what is stated in the *Natya Shastra* and *Samarangana Sutradhara*. In particular if we follow the suggestion of Sthapati that this *mudra* resembles a crab then we should look at *karkata* (crab or Cancer) *mudra* of the texts and consider *kataka* as a misspelling for *karkata*. This, however, is not solely a problem of terminology; the position of the hands is also different. According to the descriptions provided by the secondary literature, it appears that only one hand is used, whereas in the *Natya Shastra* this position is one of the *samyuta* or combined *mudras*. The *Natya Shastra* (9.132-133) explains that in this gesture the fingers are interlocked resembling a *karkata* (crab). The text adds that this position is used to represent either yawning, supporting the chin or holding a conch shell in order to blow it (*The Natya Sastra of Bharatamuni* 2000, p. 143-144). In the *Natya Shastra* there is also another *mudra* with a similar name, but also in this case it does not seem to correspond to the *kataka mudra* identified in the secondary literature. This *mudra* is named *khataka-mukha mudra*. The *Natya Shastra* (9.60-63) clarifies that this gesture is a non-combined *mudra* in which the forefinger is kept curved and pressed down by the thumb, and the ring finger and the little finger are raised and bent. This gesture is used for example in the representation of *hotra* (sacrifice), *havya* (offering into the fire), pulling the rains, fanning, holding a mirror, cutting, powdering, arranging a pearl-necklace, tucking up the loose ends of robes, drawing of arrows, gathering of flowers and seeing a woman (*The Natya Sastra of Bharatamuni* 2000, p. 137). *Kataka mudra* of secondary literature and *khataka-mukha mudra* of the *Natya Shastra* are two non-combined *mudras*, but also in this case their descriptions appear to be slightly different. We should also note that the texts analysed here do not mention a *mudra* called *simha-karna*. These examples suggest much imprecision in current studies. While the ideas of scholars like Rao and Banerjea are still used by art historians, their research seems to be based on observation and speculation rather than textual sources, despite their claims to the contrary.

### *Pada mudras*

This section analyses some of the postures of standing (*sthanaka*) images according to three main texts: the *Samarangana Sutradhara* (80), the *Natya Shastra* (11) and the *Vishnudharmottara* (39). The *Samarangana Sutradhara* mentions 6 *pada mudras* in which standing images can be portrayed. They are *vaishnava*, *samapada*, *vaishakha*, *mandala*, *pratyolidha* and *alidha*. The same *pada mudras* are found in the *Natya Shastra* (11) and the *Vishnudharmottara* mentions *alidha* and *pratyolidha* as two shooting postures.

The *Samarangana Sutradhara* (80.3-5a) explains that the name *vaishnava pada mudra* derives from the god Vishnu who is the presiding deity (*adhidevata*) of this position. In this position the feet are at a distance of 2 and a half *talas* one from the other. Figure 70 represents this position according to Sthapati (2002) who does not seem to respect the distance of two and a half *talas* between the feet. Shukla (1956, pp. 243-244) clarifies that in this posture one foot is in its natural position and the other is obliquely placed and a bit bent, with the toes turned towards the side. Both thighs are a little bit bent. Bharata in his *Natya Shastra* (11.53-57) explains that *vaishnava pada mudra* is suitable for carrying on natural conversation by men of superior and middling types having many activities and duties. This position should be employed while throwing the discus, holding the bow when in excessive anger and also during the bold and stately movements of the limbs. It should also be employed in rebuking, love, anguish, suspicion, jealousy, fierceness, anxiety, intellectual activity, recollection, wretchedness, fickleness, arrogance, yearning and power, and when the sentiments of *shrngara*, *adbhuta*, *vira* and *bibhatsa* are introduced (*The Natya Sastra of Bharatamuni*, 2000, pp. 165-166).

The *Samarangana Sutradhara* (80.5b-6a) states that Brahma is the tutelary deity of *samapada* (even feet). In this position the distance between the feet is of one *tala*. Figure 71 represents this *pada mudra* according to Sthapati (2002) who does not seem

to consider the distance of the feet as one *tala*. The *samapada* posture is also mentioned in the *Vishnudharmottara* (39.45) as having straight legs. The *Natya Shastra* (11.58-60) explains that this position should be employed for the people receiving blessings from *brahmins*, in portraying birds, for the bridegroom wearing the auspicious thread, persons moving in the sky, persons in a chariot or aerial cars, *shaiva* devotees and persons observing vows (*The Natya Sastra of Bharatamuni*, 2000, p. 166).

According to the *Samarangana Sutradhara* (80.6b-8a), Vishakha is the presiding deity of *vaishakha pada mudra*. In this posture the distance between the two feet is 3 and a half *talas*. Sthapati (2002, p. 63), who also bases his study on textual sources, claims that the distance between the feet in this position is of two and a half *talas* (Figure 72). The *Natya Shastra* (11.62-64) explains that in this position the thighs remain steady and reclined and the feet are placed obliquely pointing sideways. This position is suitable for the performance of exercises and coming out of any places (*The Natya Sastra of Bharatamuni*, 2000, p. 166). *Vaishakha pada mudra* is also mentioned in the *Vishnudharmottara* (39.43) as a shooting posture.

The *Samarangana Sutradhara* (80.8b-9b) states that the tutelary deity of *mandala* (circular) *pada mudra* is Indra and that in this position the distance between the two legs is 4 *talas*. The *Natya Shastra* (11.65-66) adds that the feet are to be placed obliquely with sideward turn. The waist and the knee are to remain in their natural position. It is stated that thunderbolt and bow should be handled remaining in this position. This position is also suitable for riding elephants (*The Natya Sastra of Bharatamuni*, 2000, p. 166). The *mandala* posture is mentioned in the *Vishnudharmottara* (39.45) as having partially straight legs.

The *Samarangana Sutradhara* (80.9b-10) states that *alidha pada mudra* has Rudra as presiding deity. In this position the right foot is moved forward with respect to the left foot which lies at a distance of 5 *talas*. According to Sthapati (2002, p. 64), however, in this posture it is the left foot that should be placed in front and the right one stretched behind (Figure 73). The *Natya Shastra* (11.68-69) explains that the acts related to *vira* and *raudra rasas* such as arguments resulting from anger and wrath, challenging

utterances of wrestling champions, the observation and survey of enemies, launching attacks on them and the discharge of arrows should all be performed in this position (*The Natya Sastra of Bharatamuni*, 2000, p. 167).

The *pratyaliḍha pada mudra* (SamSut 80.11) is the opposite of *aliḍha*. In this position the left foot is moved forward and the right foot remains beyond at a distance of 5 *talas*. A very peculiar representation of *pratyaliḍha* is given by Chatterjee Sastri (1971) in Figure 74. The *Natya Shastra* (11.71) adds that the discharge of diverse kinds of missiles should be performed after assuming this posture (*The Natya Sastra of Bharatamuni*, 2000, p. 167). The *Vishnudharmottara* (ViDha 39.43 in Dave Mukherji 2001, pp. 94-95) mentions *pratyaliḍha* as a shooting posture.

The *Vishnudharmottara* also states some examples of postures deriving from the movement of different parts of the body. They are *nata* (bent), *ullepa* (sporting), *calita* (walking), *uttana* (reclining), and *valita* (turning around) (ViDha 39.38-42 in Dave Mukherji 2001, pp. 92-95). It also mentions that the bearers of sword and shield have a dynamic and fascinating *gomutrika* or zig-zag stance. Persons holding a lance, a javelin, a stone and an arrow should be walking, staggering, exerting and shooting respectively (ViDha 39.47-48d in Dave Mukherji 2001, pp. 96-97). Those carrying a wheel, a spear, a mace and a lance should be leaping (ViDha 39.48cd in Dave Mukherji 2001, pp. 96-97). The *Vishnudharmottara* also clarifies that a female should be represented with one foot straight and the other languid. The body should be made pliant in some parts and firm in some others. The enormous hips should be depicted swaying in playful abandon and one leg should be stiff while the other is relaxed (ViDha 39. 49-50 in Dave Mukherji 2001, pp. 96-97).

### *Asanas*

This section analyses some of the *asanas*<sup>10</sup> or sitting postures of images according to the *Vastusutra Upanishad* and some of their interpretations in secondary literature. The six principal *asanas* mentioned by the *Vastusutra Upanishad* (6.18 and commentary in Boner 1982, pp. 89-92) are *sukhasana*, *vishamasana*, *svastikasana*, *yogasana*, *kukkutasana*, and *saumyasana*. The text explains that *asanas* reveal the action of the figure and derive from the actions of sacrifice. The position in which the priests are seated on *darbha*-grass<sup>11</sup> in their own hall is named *sukhasana*. The way in which the priests pull the ropes while killing the fire is named *vishamasana* (asymmetrical pose). The way in which the *acaryas* seat themselves on the *vedi* is the *svastikasana*. The position in which the *brahmins* are seated with bent hips at the time of putting on the sacred thread in the rite of protection, arranging and tying the thread, is the *yogasana*. The way in which the *brahmins* are seated while worshipping the sun is the *kukkutasana*. The way in which the priest extends the hands towards the east at the time of twilight worship is *saumyasana*. The text continues explaining that the *asana* reveals the emotional state embodied in the action of the image. The *sukhasana* gives a peaceful attitude to the image. The *vishamasana* shows a heroic attitude or hurling. The *svastikasana* reveals the attitude of wisdom. The *yogasana* shows the attitude of realisation of *brahman* or self-realisation. The *kukkutasana* reveals the attitude of longing and the *saumyasana* conveys a feeling of firmness.

From the above explanation it emerges that the *Vastusutra Upanishad* seems more concerned about the intrinsic value of the *asanas* and does not explain their aesthetic representations, which were probably well known. Also in this case, to know how the *asanas* are represented in sculpture and painting, we need to turn to secondary literature, which, in some cases, shows discrepancies of interpretation.

<sup>10</sup> Banerjea (1941, p. 296) explains that in some particular contexts the word *asana* could mean the seat of a particular god or goddess. *Padmasana* for example, could be a seat of a god with the form of a lotus or a position of the legs.

<sup>11</sup> Bunch of grass used for certain sacrificial purposes (Monier-Williams, 1994).

*Sukhasana* (*sukha*: pleasant, comfortable) is described by Sthapati (2002, p. 61) as a position in which an image has one leg folded flat and the other hanging in a very reposeful manner (Figure 75). Banerjea (1941, p. 296) explains that *sukhasana* has one leg, generally the left one, resting on the seat while the right knee is raised upwards on the seat and the right arm rests on the raised knee. The representation of this posture in Boner (1982) appears different from the two descriptions above (Figure 76).

*Svastikasana* (*svastika*: mystical mark), according to Sthapati (2002, pp. 62-63), is a variation of *yogasana*. Both postures are representative of a yogic state. In *yogasana* the image is seated in *padmasana* (*padma*: lotus) or cross-legged, with the hands placed close to the body. Also in *svastikasana* the body is seated cross-legged but the writer does not seem to explain very clearly what are the differences between the two *asanas* (Figures 77 and 78). Boner (1982) represents this *asana* in a slightly different way (Figure 79). Sthapati also maintains (2002, p. 64) that *svastikasana* can be a position of standing images in which one leg is held firmly on the ground and the other is crossed over in front and rested on the toes (Figure 80). This posture can be seen in images of Krishna playing the flute.

Banerjea (1941, p. 295) says that *kukkutasana* (*kukkuta*: wild cock) is a variety of *padmasana* (*yogasana*), where the whole weight of the body rests on two arms placed on the ground on both sides. Boner (1982) however, has a different view of the representation of this posture, which is shown in figure 81.

*Vishamasana* (*vishama*: uneven irregular) and *saumyasana* (*saumya*: related to *soma*)<sup>12</sup> are represented in figures 82 and 83 according to the interpretation of Boner (1982). We should note that in these two *asanas* there is no explanation of their aesthetic representations and other writers do not mention them.

Rao and Sthapati refer to other kinds of *asanas* that occur in pictorial and sculptural representations. They still forget to mention the sources of their study. Only Banerjea (1941, p. 294) explains that the *Ahirbudhnya Samhita* lists as many as eleven

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<sup>12</sup> *Soma* is the juice of a milky climbing plant extracted and fermented, forming the beverage offered in libations to the deities, and drunk by *brahmans* (Dowson, 1992).

principal *asanas* such as *cakra* (wheel), *padma* (lotus), *kurma* (turtle), *mayura* (peacock), *kukkuta* (wild cock), *vira* (hero), *svastika* (mystical mark), *bhadra* (splendid, blessed), *simha* (lion), *mukta* (relaxed, liberated) and *gomukha* (cow-faced). Among them, for example, the *virasana* (heroic pose) is interpreted differently by the scholars. Rao (1914) and Banerjea (1941, p. 295) state that in this posture the left foot rests upon the right thigh and the right foot upon left thigh. According to Sthapati (2002, p. 62), the posture described is called *raja lingasana* (Figure 84), whereas *virasana* (Figure 85) is represented with a leg hanging down and placed on the ground and the other leg bent with its foot resting on the knee of the other leg.

## Conclusions

In the first part of this chapter we have analysed two main systems of the theory of stances. The description of stances in the *citrasutras* involves applying the same male prototype of the previous chapters. This denotes a consistent approach to the way of dealing with the theory, and emphasises the abstractness of the views expressed by the *citrasutras*. The established view that the *citrasutras* are prescriptive texts contrasts markedly with the theory as expounded, which actually only seeks to develop a method to describe all possible stances in a technical and abstract way. While the system of a man rotating on an axis would work very well in the mind, the painter is given the liberty to create according to his own discretion. Rather than signifying a prescriptive rule, the abstract quality of the descriptions of postures suggests that the system is adaptable and flexible.

On the practical level, there are schools of painting that develop their own language without any apparent link to the texts. This includes the preference to adopt certain postures, such as profile and frontal stances in Orissa painting, the profile for Pahari and Rajasthani painting (Figure 86), and three quarter profile and frontal stances in the Jaina painting of Gujarat and other places (Figure 87). The frontal stance is often preferentially used in Indian painting for the depiction of gods. While none of the texts



prescribe such a rule, this practice seems to be established in extant paintings (see for example Figures 1, 48 and 87). Such discrepancies between theory and practice should not be seen as revealing contrasting or conflicting views. While the use of postures in painting depends on external factors and its relative coherence according to a school of painting and its vocabulary, textual models can be actively worked out as visual images in the mind given their abstract quality, which offers a wide range of possible interpretations and uses. A key characteristic of the texts on Indian painting, therefore, is that they do not impose any rules, but rather provide adaptable models that are designed to encourage artistic expression, together with interpretative multiplicity. These characteristics make the texts relevant to the reading of any Indian painting or sculpture.

For *mudras*, *pada mudras* and *asanas* there is no actual system like that of stances. In many cases the theory is reduced to a mere listing of names. The texts concisely describe these positions to the extent that sometimes we do not find explanation of their aesthetic representation at all, such as in the *Vastusutra Upanishad*. This may be the cause of the prevailing confusion and misinterpretation of the texts in the secondary literature, where the views of scholars like Banerjea, Rao and Sthapati are sometimes in conflict with the texts as well as among themselves. This appears to be the result of a lack of analytical and methodological rigour; the scholars seem to have articulated their own interpretation on the basis of observation of, and speculation about extant painting and sculpture. They also sought to impose their own ideas about Indian art and texts onto extant pictorial and sculptural representations, even where gaps in our understanding exist.

Another point raised in this chapter is that of the relevance of the theory of dance and of the *Natya Shastra* in the study of *mudras*. This point was briefly introduced in chapter 2 where it is argued that the theory of dance is relevant to painting on the basis of what is said by the *Vishnudharmottara*. This view seems to be misinterpreted in secondary literature where for example Sthapati (2002) confuses the practice of dance with its theory. While on a practical level, dance and painting developed their own specific language in the representation of *mudras*, at a theoretical level they can both rely

on a text like the *Natya Shastra*. Even if it is impossible to apply all the *mudras* enumerated in the *Natya Shastra* to painting or sculpture, this does not mean that the theory is irrelevant. This point, however, appears to have confounded Banerjea (1941) who was expecting a word-by-word application of the theory of *mudras* to extant sculpture and painting. As demonstrated, the *Natya Shastra* must be viewed as a theoretical position, whereas the application of all its precepts goes beyond the message and the scope of the text and, as in many other concepts of the *citrasutras*, it would be impossible to try to apply the theory in its entirety. The *Natya Shastra* is not the only textual source for the study of *mudras*, but *mudras* are frequently mentioned along with the descriptions of gods in the *pratimalakshana* sections of texts and are also mentioned in the *Vastusutra Upanishad*. In both cases, *mudras* are mentioned without clear explanation of their aesthetic representations, as if they were already well-known. This, however, did not prevent scholars from forcing their own interpretation of the *mudras* into what was left unsaid by the texts. This approach created, in some instances, great confusion, as we saw in the case of interpreting the meaning and representation of *kataka mudra*.

Furthermore, our analysis also revealed that the theory of *pada mudras* contained in the *Natya Shastra* and the *Samarangana Sutradhara*, is misleadingly underestimated by scholars, who seem to be more concerned with seeking to *unlock* the secrets of *mudras* and *asanas*. *Pada mudras* in these texts are equally important. They are concisely described and can be easily recognised in actual paintings. The only author that considers, to some extent, the importance of *pada mudras* is Sthapati, who, however, gives different measurements for the distance of the feet from what seems to be very well established by the two textual sources analysed.

The *asanas* also present textual and interpretative problems. The only source analysed here is the *Vastusutra Upanishad*, which, as in the case of *mudras*, only mentions the names of the *asanas* without explaining their aesthetic representation. This means that in that context those *asanas* were very well known. The texts seem, in fact, to have concentrated on the intrinsic value of the *asanas* more than their visual one.

There also seems to be some confusion among scholars in their interpretations, as we saw in the case of *virasana*.

Practising painters and sculptors of today are aware of *mudras*, *pada mudras* and *asanas* without ever having read the texts. Of course their knowledge is limited to the positions commonly used and which they have learned from practice. Sculptors that I interviewed in Orissa and Rajasthan professed knowledge about *mudras* like *varada* and *abhaya*, as did the sculptors of the Jaina studio of Jaipur (Figure 29). About this studio, it is important to stress the great deal of freedom that artists have in actually using the *mudras*. As we saw, the approach to copying from the figure of *tirthankara* Vasupujya (Figure 30) can be seen as a way of achieving the right measurements, but in terms of hand postures and details there is considerable freedom for the artists. While the model figure from which sculptors sought to make a copy has both the hands in *dhyana mudra*, in practice they can change the positions of the hands with different combinations, using for example *abhaya* or *vyakhyana mudras*.

In our study we are also trying to emphasise that the use of certain *mudras* or *pada mudras* depend on choices that are determined by external events rather than by following the rules of a text. A good example of how external factors can influence the practice of painting with important changes in tradition is given by the image of Shri Nathji in Nathdvara. The iconography of Shri Nathji, in terms of his posture, *mudras* and *pada mudra*, appears to be stereotypical. He is standing in a frontal position with his feet in *samapada*, the left hand raised as if lifting Mount Govardhan and the right one on his waist. His *samapada mudra* as we see it today is different from the older representations of the god. This position underwent a radical change after 1880 (Ambalal 1987, p. 83-84). Before that period the god was represented in *samapada* with the feet pointing sideways (Figure 88). After that date, a famous Hindi writer, Bhartendu Harishchandr, visited Nathdvara and commented that his posture was unnatural, the result of which was a turning of his feet from the side to the front (Figure 48). Both these positions can be considered traditional, in fact the *Natya Shastra* and the *Samarangana Sutradhara* describe *samapada* as a position in which the feet are even, but they do not specify

whether the feet should be kept pointing sideways or towards the front. Also in this case, the characteristic of the texts of being abstracted from time, space and practice make them variously applicable to the figure of Shri Nathji.

Another interesting example of the changes in traditional approaches to *mudras* can be seen in analysing one of the hand postures of Shri Nathji. The left hand of Shri Nathji is raised in the act of lifting Mount Govardhan. This posture symbolises one of the events of the life of Krishna,<sup>13</sup> of whom Shri Nathji is a representation. This hand posture is not one of the canonical *mudras* and it is neither mentioned by the texts analysed here nor by writers in the secondary literature. This is not to say that this hand posture is not traditional, but its use came into existence along with changes in religion and with a consequent necessity to depict this important event of the life of Krishna, celebrated for example in the *bhakti* literature and by the devotees of Krishna and Shri Nathji. The same position of the hand is adopted in miniature painting of the Pahari and Rajasthani schools and also in mural paintings, as for example in the *Govardhanagiridhari* painting in the Mattancheri Palace in Kochi (see Sivaramamurti 1994, p. 114).

The texts, while trying to fix the theory, are thus also designed to give freedom to the artist to innovate. This freedom is encouraged by the abstract character of the texts. This means that while an artist should have in his mind the system of knowledge constituted by the theory of painting or sculpture, he should also be able to adapt its flexibility to given circumstances, like external changes and new ideas. The emergence of a religious movement such as that of the *bhakti* produced some important transformations in the arts that were required to express new feelings and ideas. These kinds of changes do not only happen at the practical level; texts themselves can also change for the same reasons. A similar kind of addition or adaptation, on the level of the texts, can be seen in the *rasa* theory, analysed in chapter 8, in which the theorists after Bharata added other *rasas* to his traditional list of eight. The new *rasas* not only denoted a development in thought, but were also meant to represent new feelings determined by

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<sup>13</sup> In this event, Krishna lifts the Mount Govardhan to protect the inhabitants of Braj (the place where Krishna appeared on earth) from the rains sent by the god Indra, when the people of Braj stopped their offerings to him.

social, religious or other changes. Among the new *rasas* is for example *prema rasa* added by King Bhoja, which seems to represent not only the love of parents for children but also the love of devotees toward a god like Krishna as a child or Shri Nathji.

## Chapter 6

### Iconography

The knowledge expounded in the previous chapters would not be complete without a study of Indian traditional iconography. Iconography is generally studied separately from the knowledge of the *citrasutras*, but in order to gain a holistic view of the texts it is necessary to have a glimpse at the description of gods. The separation between the *citrasutras* and the chapters on iconography was once again due to the tendency to consider painting and sculpture as two separate entities. However, this knowledge applies not only to sculpture but also to painting. In fact, representations of gods occur in painting too. The images of gods described in the texts are for worship and for this reason great emphasis is placed on perfection and beauty, concepts already mentioned in the previous chapters.

The sections of texts on iconography are generally titled with the name of *pratimalakshana* or “characteristics of image.” As with the word *citra* (see chapter 2), also in the case of the word *pratima* it is suggested that the term does not necessarily mean a “sculptural image” but can have the more general and abstract connotation of “image,” that is an image that works in the mind.

The texts used in this study are the *Brhat Samhita*, the *pratimalakshana* section of the *Vishnudharmottara*, the *Mayamata*<sup>1</sup> and the *Devata-murti-prakarana*. The *Brhat Samhita* contains a single chapter on iconography, chapter 58, which concentrates on the description of gods like Lord Narayana, Baladeva, goddess Ekanamsha, Brahma, Indra, Shiva, Buddha and Jina. The *pratimalakshana* section of the *Vishnudharmottara* (part III, chapters 44-85) is the portion of the text following the *citrasutra*, and it takes for granted that the reader knows the theory previously expounded. Chapter 44 starts with Vajra asking Markandeya to explain how to make images of gods in order to make them conform to the canonical prescriptions (ViDha 44.1 in Bhattacharyya 1991, p. 1). From this question arises the long description of gods; among them are: Brahma,

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<sup>1</sup> The *Mayamata* is a south Indian treatise on architecture and iconography ascribed to the architect Maya and datable to the Gupta period (Dagens, 1994).

Vishnu, Shiva, Yama, Agni, Vayu, Bhairava, Sarasvati, Soma, Lakshmi and Vishvarupa.

Chapter 36 of the *Mayamata* contains descriptions of the characteristics of gods like for example Brahma, Vishnu, Varaha, Trivikrama, Narasimha, Maheshvara, the sixteen manifestations of Shiva, Ganadhipa, Surya, Garuda, Lakshmi, Buddha and Jina.

The *Devata-murti-prakarana* has five chapters on iconography. Chapter 4 describes Brahma and images related to Brahma like Vishvakarma, Kamalasana, Virinci, Pitamaha and the four Vedas (Vinaysagar 1999, pp. 75-101). Chapter 5 describes Vishnu and images related to him like Garuda, Trivikrama, Rama, Varaha, Vishvarupa and Ananta (Vinaysagar 1999, pp. 102-140). Chapter 6 describes images related to Shiva like Vamadeva, Aghora, Mrtyunjaya, Sadashiva, Ardhanarishvara, Uma-Maheshvara and Shiva-lingas (Vinaysagar 1999, pp. 143-202). Chapter 7 is dedicated to the description of the 24 Jaina *tirthankaras* and their attendant *yakshas* and *yakshinis* (Vinaysagar 1999, pp. 204-232). Chapter 8 describes goddesses like Uma, Parvati, Savitri, Mahalakshmi, Sarasvati and Lakshmi together with Ganesha and Karttikeya (Vinaysagar 1999, pp. 233-277).

The chapters on *pratimalakshana* contain a huge knowledge on the images of gods with their attendants, attributes, marks and weapons,<sup>2</sup> but for the purpose of this study only some of them will be considered: Brahma, Vishnu, Ganesha, Lakshmi and Jina. Brahma has been chosen among the gods because of the prominent position he has in all the texts considered in this study. Other gods have been selected to give an idea to the reader of the wide discrepancy between texts and textual images on the one hand and sculptural and pictorial images on the other.

### **Brahma**

The most concise description of Brahma (Figure 89) is to be found in the *Brhat Samhita*. The text explains that Brahma must have four faces, a water pot or

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<sup>2</sup> A weapon (*ayudha* or *badhra*) is an emblem which communicates the power of the figure. The *Vastusutra Upanishad* (6.17 and commentary in Boner 1982, pp. 86-89) enumerates weapons as follows: *vajra* (thunderbolt), *dhvaja* (flag), *danda* (rod), *pasha* (noose), *shula*

*kamandalu* (Figure 90) in his hand and he should be seated on a lotus (BrSam 58.41 in Bhat 1981, p. 558).

Brahma is described in chapter 44 of the *Vishnudharmottara* as serene and satiable, with four arms and seated in *padmasana* pose on a chariot drawn by seven swans. He should be shown with matted hair and as wearing the skin of a black antelope as the garment. On his left palm is placed one of the right hands (*dhyana mudra*). The god should have the auspicious rosary or *aksha-sutra* (Figure 91) in the remaining right hand, and the water vessel (*kamandalu*) in the left. In the iconic representation,<sup>3</sup> in painting and sculpture, the god should be shown with the complexion of the tip of the lotus petal and with his eyes closed in meditation (ViDha III.44.5-9a in Bhattacharyya 1991, pp. 2-3). The image of Brahma is further explained in chapter 46, which states that his frontal face is the Rgveda, the face to the right is Yajurveda, the face at the back is the Samaveda, and the remaining face is the Atharvaveda. The text adds that the entire world is symbolised by water that Brahma holds, and for this reason he has the water vessel in his hand. The rosary in the hand of Brahma is indicative of time. The saint performs the sacrifice through an act which is both white and non-white at the same time, thus the garment of Brahma should be known as the skin of the black antelope (ViDha III.46.7-12a in Bhattacharyya 1991, pp. 16-18).

The *Mayamata* states that Brahma has four faces and four arms, he is like the colour of pure gold; his braided hair is shaped like a diadem and like a crown from which he emanates reddish rays like a garland of lightning. He wears ear-pendants, armlets and a necklace; a gazelle skin must cover him up to the base of the neck according to the *upavita* (sacred thread) mode. His tawny thighs are encircled by *munja* grass,<sup>4</sup> he wears white clothing and white garlands and is immaculate. He holds

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(spear), *patra* (bowl), *sruk* (sacrificial ladle), *padma* (lotus), *mala* (rosary), *cakra* (discus), *kumbha* (pot), *ankusha* (elephant-goad).

<sup>3</sup> Images can have an iconic (*vyakta*) and an aniconic (*avyakta*) form. The *vyakta* representation of a god has a human form, like for example an image of Vishnu. The *avyakta* representation is symbolic, like for example the Shiva *linga*. To these two forms, Sthapati (2002, p. 3) adds the *vyaktavyakta* or morpho-amorphic form in which symbolic and bodily features are combined, like for example in the representation of *mukha-linga*.

<sup>4</sup> Species of rush or sedge-like grass (Monier-Williams, 1994).



the *aksha* rosary and a bundle of *kusha* grass<sup>5</sup> in his two right hands and a water-pot (*kamandalu*) and *kusha* grass in his left ones; or he holds the spoon and the ladle (*sruc* and *sruva*) (Figure 92) in his right hand and the pot of clarified butter and the *kusha* grass in his left one; or else his two lower hands make the gesture of bestowing (*varada mudra*) and that of absence of fear (*abhaya mudra*). Savitri is to his right and Bharati to his left, the sages make up his retinue. His mount is the goose and his emblem the *kusha* grass. Whether standing or seated, Brahma is on a lotus form pedestal (*Mayamata* 36.2-7 in Dagens 1994, pp. 820-823).

The *Devata-murti-prakarana* presents different forms of Brahma. The Kamalasana form of Brahma has four heads and four arms, symbolic of the four *Vedas*, four *yugas* and four castes. Kamalasana holds a rosary (*aksha-sutra*) in his lower right hand and a spoon for offering oblations (*sruc*) in his upper right, while his lower left hand holds a book and the upper a *kamandalu*. Seated on a red lotus, Kamalasana is beneficial for all the castes, and for those who make such idols as well as for those who have them made (DMP 4.2-4 in Vinaysagar 1999, pp. 75-76). The Virinci form of Brahma bears a rosary, a book, the spoon for offering oblations and a *kamandalu* in his four arms. Virinci bestows happiness to all in the *dvaparayuga* (DMP 4.5 in Vinaysagar 1999, pp. 76-77). The Pitamaha form of Brahma holds a *kamandalu*, a rosary, the oblation spoon and a book respectively in his four hands. This image gives happiness in the *tretayuga* (DMP 4.6 in Vinaysagar 1999, p. 77). Brahma is holding a book, a rosary, the spoon for oblations and a *kamandalu* respectively. This image bestows happiness in the *satyayuga* (DMP 4.7 in Vinaysagar 1999, p. 77). The main difference between the various forms of Brahma in the *Devata-murti-prakarana* lies in the order in which their weapons are kept in the hands.

The iconographical differences between the various texts are summarised by the table below:

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<sup>5</sup> Type of sacred grass used at certain religious ceremonies (Monier-Williams, 1994).

**Table XIII**  
**Characteristics of Brahma**

Texts	Attributes	Weapons	Seat
BrSam	4 faces	Water pot	Lotus
ViDha	4 arms, 4 faces, wearing antelope skin, matted hair	Rosary, water pot, right hand placed on left hand	Seated in <i>padmasana</i> on a chariot
Mayamata	4 arms, 4 faces, braided hair, wearing gazelle skin	Rosary, <i>kusha</i> grass, water pot; Or spoon and ladle, pot of clarified butter, <i>kusha</i> grass, <i>varada</i> and <i>abhaya mudras</i>	Lotus pedestal
DMP	4 arms, 4 faces	Rosary, spoon, book, water pot	Red lotus

### Vishnu

According to the *Brhat Samhita*, Vishnu (Figure 93) must be made with eight, four or two arms. His breast must bear the *shrivatsa* sign (Figure 22) and must be adorned with the *kaustubha* gem.<sup>6</sup> He should be represented as dark as the *atasi* (flax) flower, be clad in yellow robes, have a serene and gracious countenance, wear a diadem and ear-rings, and have plump neck, breast, shoulders and arms. When he is portrayed with eight hands, the four on the right side must hold the sword, mace, arrow and the *abhaya mudra*, and the four on the left side, the bow (*karmuka*) (Figure 94), club (*khetaka*), discus (Figure 95) and conch (Figure 96). In cases where he has four arms, the two on the right side will bear the *abhaya mudra* and the mace (Figure 97), and on the left the conch and the discus. If he is represented with two arms, the right one will be in *abhaya mudra* and the other will hold the conch (BrSam 58.31-35 in Bhat 1981, pp. 556-557).

The *Vishnudharmottara* explains that Vishnu, the god of gods, should be represented as being seated on Garuda, as having the chest shining with the *kaustubha* jewel, as wearing all ornaments and the garments of yellow colour and as showing the complexion of the clouds laden with moisture. His image should have four faces and a double number of arms. His eastern face should be serene, the southern one should be

<sup>6</sup> *Kaustubha* is the name of a celebrated jewel obtained from the mythological churning of the ocean (Monier-Williams, 1994)

that of a man-lion, the western face should be wrathful, and the remaining one should be of a boar. In his right hands there should be the arrow, the lotus, the club (*musala*) and the sword (Figure 98). Vishnu wearing the *vanamala* (garland of flower) should be represented as holding the shield, the ploughshare, the bow and the disc in his left hands (ViDha III.44.9b-13b in Bhattacharyya 1991, pp. 3-4). Chapter 47 adds that Vishnu is black (*krshna*) because all the manifestations are black in colour. The *kaustubha* gem symbolises the pure knowledge. The *vanamala*, which is known to be black, long and variegated, binds the entire movable and immovable world (ViDha III.47.1-4a in Bhattacharyya 1991, pp. 22-23). The *Vishnudharmottara* describes other forms of Vishnu, like for example the one having a single face and two hands holding the mace and the discus. The text also adds that the mace subdues all creatures, and the discus represents the wheel of *dharma*, the cycle of time and the zodiac wheel (ViDha 60.2-5 in Bhattacharyya 1991, p. 94)

The *Mayamata* states that Vishnu is provided with a tiara, armlets and bracelets, he is adorned with a hip girdle and other ornaments and his clothing is yellow. He has four arms and his anterior hands make the gesture of bestowing (*varada mudra*) and that of absence of fear (*abhaya mudra*), while in the other two he holds the conch and the discus. He is immaculate. Whether he is standing or seated, Avani is on his left and Rama on his right. He is on a throne or on a lotus, dark in colour he is immovable and shining. The radiance of Shri Lakshmi and Bhumi makes him shine and his eyes are like lotuses. His image is to be installed by the sages for those who seek liberation. Garuda is his emblem and his mount (*Mayamata* 36.8-12a in Dagens 1994, pp. 822-823).

The image of Vishnu has twenty-four forms according to the *Devata-murti-prakarana*. It seems, however, that the difference between the various forms consists simply in the order in which the weapons are kept in their hands. Among the images described are for example the Keshava form holding a lotus (*padma*), a conch shell (*shankha*), a disc (*cakra*) and a mace (*gada*); the Madhusudhan form holding a disc, a conch-shell, a lotus and a mace; and the Damodara form holding a lotus, a conch-shell, a mace and a disc (DMP 5.8-13 in Vinaysagar 1999, pp. 104-106).

The following table highlights the differences between the descriptions of the texts examined.

**Table XIV**  
**Characteristics of Vishnu**

Texts	Attributes	Weapons	Seat
BrSam	8, 4 or 2 arms, <i>shrivatsa</i> and <i>kaustubha</i> gem, dark colour, yellow clothing	8 arms: sword, mace, arrow, <i>abhaya mudra</i> , bow, club, discus, conch; 4 arms: <i>abhaya mudra</i> , mace, conch, discus; 2 arms: <i>abhaya mudra</i> , conch	-
ViDha	4 faces and 8 arms or 1 face and 2 arms <i>kaustubha</i> gem, dark colour, yellow clothing	8 arms: arrow, lotus, club, sword, shield, ploughshare, bow, disc; 2 arms: mace and discus	Garuda
Mayamata	4 arms, yellow clothing, dark colour	<i>Varada</i> and <i>abhaya mudras</i> , conch, discus	Garuda
DMP	24 forms	Lotus, conch, discus, mace	-

### Ganesha

The *Brhat Samhita* explains that Ganesha (Figure 99) is the lord of the *pramathas* (demons) and has the face of an elephant, with a single tusk, a bulging belly, an axe (*kuthara*) in one hand and a radish bulb with very dark foliage and root in the other (BrSam 58.58 in Bhat 1981, p. 563).

The *Mayamata* states that Ganesha or Ganadhipa has an elephant's face and only one tusk, he is upright and holds himself to the right; he has three eyes; he is red, he has four arms and looks like a dwarf with a huge belly. A snake is his sacrificial thread. His thighs and knees are fat and heavy; he is seated on a lotus throne with the left leg stretched out and the right bent. His trunk bends to the left. In one of his right hands he holds his broken tusk and, in the other, an *ankusha* or elephant hook (Figure 100); the *aksha* rosary should be in one of his left hands and a sweetmeat on the other. His hair is coiled into a tiara; he is adorned with necklaces and other jewels. He may also be

standing on a lotus pedestal. When he is dancing he has six or four arms. The rat is his mount (*Mayamata* 36.122-126 in Dagens 1994, pp. 848-849).

According to the *Devata-murti-prakarana*, Ganesha holds a tusk (*danta*), an axe (*parashu*) (Figure 101), a lotus (*padma*) and a sweet (*modaka*) in his hands, and he has the face of an elephant. His vehicle is a mouse (*mushaka*). He bestows the *siddhis* (accomplishments) and grants all desires and wishes (DMP 8.22 in Vinaysagar 1999, pp. 241-242). He may also appear in different forms like Heramba who has ten arms (Figure 102). The lowermost right hand is in *varada mudra*, the next holds a goad (*ankusha*), the other hands hold a tusk (*danta*), an axe (*parashu*), and the fifth is in *abhaya mudra*. The other five hands hold a skull (*kapala*), an arrow (*shara*), a rosary (*aksha-sutra*), a noose (*pasha*) (Figure 103) and a mace (*gada*). He has five faces, each with three eyes (DMP 8.23-24 in Vinaysagar 1999, p. 242). Another form of Ganesha is Bijaganadhipa who is vermilion (*sindura*) in colour and he has three eyes and possesses a rod (*danda*), a noose (*pasha*), a goad (*ankusha*) and a citron (*bijapura*) in his four hands (DMP 8.28 in Vinaysagar 1999, p.244).

The following table highlights the differences between the descriptions of the texts examined.

**Table X**  
**Characteristics of Ganesha**

Texts	Weapons
BrSam	Axe, radish bulb
Mayamata	Broken tusk, <i>ankusha</i> , rosary, sweet
DMP	Tusk, axe, lotus, sweet

### Lakshmi

The *Vishnudharmottara* dedicates chapter 82 to the image of Lakshmi (Figures 104 and 105). She should be portrayed with two arms when she is accompanied by Hari. She has a divine form, and shows the lotuses in the hands. She is adorned with all ornaments. The goddess has a fair complexion and wears white garments. While represented individually, she should be represented as four-armed, and as seated on a

beautiful throne. On her throne there should be a lotus with eight petals. In her right hand there should be a lotus with a long stalk which touches the end of the armlet. In her left hand there should be a vase of nectar (*amṛta ghata*). The other two hands should hold the *bilva* fruit (wood apple) and the conch. Behind her there should be two elephants pouring the contents of a jar. On her head there should be a lotus which represents fortune, and the conch representing prosperity. The *bilva* fruit symbolises the entire universe and the vase of nectar stands for the quintessence of water. The lotus in her hand is opulence and the two elephants are treasure-hoards. In the case in which Lakshmi is portrayed as standing, she should hold a conch and a lotus. She should be standing on a lotus, and should bear the complexion of the colour of the inner side of the lotus. She has two arms and is adorned with all ornaments. On her head there should be represented two *vidyadhara*s in the act of saluting and looking at the goddess ardently. Their right hand touches their head, while their left hand is shown as holding a sword (ViDha III.82 in Bhattacharyya 1991, pp. 217-221).

According to the *Mayamata*, Lakshmi is seated on a lotus, she has two arms, she is golden and shines with gold and jewels, one of her ear-pendants is in *makara*<sup>7</sup> form whilst the other is in the form of a conch. She is a beautiful, accomplished young woman whose limbs are harmonious and who plays with her arched eyebrows. Her figure is rounded, she has *karnapura*<sup>8</sup> and her eyes are like lotuses, her lips are red, her cheeks plump and her breasts covered with a bodice. Lotus, hair parting, conch and discus are her head ornaments. A lotus should be placed in her right hand and the *bilva* in her left. Her breasts and large hips are covered with a fine garment; she wears a waist girdle and a hip girdle. Her hair is arranged in a tiara and she is sitting in the lotus posture (*padmasana*). Female fan bearers should be represented at her side, along with two elephants which sprinkle her from vases which they hold with their trunks. For domestic worship Lakshmi is portrayed with four arms, her two anterior hands make the gestures of bestowing (*varada*) and absence of fear (*abhaya*) and she is illustrious with the brilliance of the red lotuses which she holds in her posterior hands. She is provided with all ornamentation and is brilliant or pure gold in shade, she is

<sup>7</sup> Fabulous crocodile-like animal representing the sign of Capricorn (Dowson, 1992).

<sup>8</sup> Dagens (1994, p. 881) explains that *karnapura* consists in having a lotus flower placed above the ear.

seated in *paryankabandha*<sup>9</sup> posture on a lotus (*Mayamata* 36.247b-255 in Dagens 1994, pp. 880-883).

The *Devata-murti-prakarana* states that Lakshmi holds celestial lotuses in her hands and is adorned with all manners of jewellery and ornaments. She is the very embodiment of beauty clad in white robes and white in complexion. Her position is the centre of an eight-petal lotus. She has four arms. In her upper right hand is a lotus stalk and in her lower right hand she holds a lotus. At her right is Yadavashreshtha in the region of her *keyura* armlets. To the left is the *amrta ghata* or pot of ambrosia. In her left hands are a *bilva* fruit and a conch-shell respectively. On her head is a lotus (DMP 8.105-110 in Vinaysagar 1999, pp. 270-271).

**Table XVI**  
**Characteristics of Lakshmi**

Texts	Attributes and weapons
ViDha	2 arms: lotuses; 4 arms: lotus, <i>amrta ghata</i> , <i>bilva</i> fruit, conch
Mayamata	2 arms: lotus and <i>bilva</i> ; two fan bearers and two elephants at her sides 4 arms: <i>varada</i> and <i>abhaya mudras</i> , lotuses
DMP	4 arms: lotuses, <i>bilva</i> fruit, conch

### Jinas

The *Brhat Samhita* and *Mayamata* contain a description of Jinas (Figures 30 and 87), but they are vague compared with the *Devata-murti-prakarana*<sup>10</sup> in which there is a

<sup>9</sup> Dagens (1994, p. 883) explains that this posture is probably equal to the *paryankasana* in which the upper part of the body is stretched stiffly erect and two legs mutually crossed and so folded that each foot is resting on the other thigh.

<sup>10</sup> The particular focus on Jaina iconography of the *Devata-murti-prakarana* can be explained with the great flourishing of Jaina temples in and around the place of the origin of the text written by Mandana at the court of Maharana Kumbha (r. 1433-1468). This text belongs to western India, a region in which many important Jaina temple complexes, like that of Ranakpur (1439), were built.

clear differentiation between various Jinas such as Mahavira,<sup>11</sup> Mallinatha and Parshvanatha.

The *Brhat Samhita* explains that a Jina should be represented naked, young, handsome and serene in appearance, with his arms reaching the knees and his breast bearing the *shrivatsa* mark (BrSam 58.45 in Bhat 1981, p. 559). From the description we can surmise that the text refers to any Jina. In fact, this view is corroborated by Sthapati (2002, p. 328) who declares that the 24 *tirthankaras* have the same characteristics (Figure 106). Each of them has a specific symbol which should be shown on the pedestal.<sup>12</sup> The *shrivatsa* mark in the middle of the chest and the three tiered umbrella over the head are common features to all of them. Sthapati also states that the *tirthankaras* should not have garments and ornaments, and that they should be fashioned according to the *uttama dasa tala*.

Some iconographic confusion arises from the passage of the *Mayamata*. According to the *Mayamata*, a Jina is blue-black in colour and is installed beneath an *ashoka* tree. The text speaks only of a Jina and we tend to associate this with Mahavira, but the *Devata-murti-prakarana* clearly explains that blue is the peculiar colour of two other *tirthankaras*: Shri Mallinatha and Parshvanatha, whereas Mahavira is of golden colour (DMP 7.4 in Vinaysagar 1999, p. 205). The *Mayamata* adds that a Jina stands on a lotus throne or on a lion throne.<sup>13</sup> His arms lie along his body, his regard is fixed on the points of his nipples, his proportions are those of a god and the height of the fan bearers is thirty digits of the god. His body must be naked. He must be worshipped by the gods and other deities and must have a triple parasol. He has two arms (*Mayamata* 36.284-287a in Dagens 1994, pp. 888-889).

The *Devata-murti-prakarana* contains a whole chapter dedicated to Jaina images but here only the section related to Mahavira will be considered. The text says that the Jina (Vardhamana) has a golden colour, his symbol is the lion, his constellation is

<sup>11</sup> Jina (Victorious) is an epithet generally related to the 24 Jaina *tirthankaras*. Mahavira (Great Hero) is an epithet referred to the 24<sup>th</sup> *tirthankara* Vardhamana, who is also known as the Jina (Monier-Williams, 1994).

<sup>12</sup> Among the symbols are for example the water pot for Mallinatha, the snake for Parshvanatha, and the lion for Mahavira (Sthapati 2002, pp. 328-329).

<sup>13</sup> According to the *Devata-murti-prakarana* (7.1-6) the lotus is the symbol of the *tirthankara* Padmaprabha and the lion is the symbol of Vardhamana.



*uttaraphalguni*,<sup>14</sup> his zodiacal sign is *kanya* (Virgo), and his attendants are Matanga and Siddhayika. Matanga is dark hued, has an elephant for his *vahana* (vehicle). His right hand holds a mongoose and the left one a citron. Siddhayika is blue-hued, has four arms and is seated on a lion. On one side she holds a book and has one hand in *abhaya mudra*, on the other side she holds an arrow (or a *vina*) and a citron (DMP 7.1-16, 66-67 in Vinaysagar 1999, pp. 204-209, 227-228). The description of the *Devata-murti-prakarana* does not concentrate on the iconographic characteristics of the image of Mahavira himself but on his symbols and attendants. The text (2.10), however, clearly states that a Jina should be of ten *talas*, a measurement described with its own characteristics in chapter 4 of this work.

Discrepancies between texts are summarised by the following table.

**Table XVII**  
**Characteristics of a Jina**

Texts	Characteristics
BrSam	Naked, young, handsome, with <i>shrivatsa</i> mark
Mayamata	Blue-black in colour, naked, two arms, lotus or lion throne, <i>ashoka</i> tree, triple parasol
DMP	Mahavira: golden colour, lion is his symbol, <i>uttaraphalguni</i> his constellation, <i>kanya</i> his zodiacal sign, Matanga and Siddhayika his attendants

## Conclusions

This chapter highlights how each god is described differently by each text. The *Brhat Samhita* for example is very concise in its descriptions, leaving many features of the gods undescribed. The *Mayamata* concentrates on purely iconographic features whereas the *Vishmudharmottara* offers not only aesthetic descriptions but also symbolic ones. For example it explains the significance of the emblems of the gods, like the water pot (*kamandalu*) which stands for the entire world, the rosary (*aksha-sutra*) that is representative of time, and the *kaustubha* gem that symbolises pure knowledge. The

<sup>14</sup> Name of the twelfth lunar mansion consisting of two stars (Apte, 2000).

*Devata-murti-prakarana* has the characteristic of presenting different forms of the gods like Brahma in his forms of Kamalasana and Virinci, or Ganesha in his forms of Heramba and Bijaganadhipa. In the case of the *tirthankaras*, however, the *Devata-murti-prakarana* does not provide descriptions of them, as if their forms were well-known, but focuses solely on their symbols and attendants. We can also derive from this text that each of the 24 Jaina *tirthankaras* should be of the same proportion of ten *talas*, and that it is only in terms of their symbols that we are able to recognise them.

The overview of some of the iconographic features of gods analysed in this chapter highlights the discrepancies between texts and the fact that the injunctions and descriptions cannot always be translated straightforwardly into a pictorial or sculptural image. Nevertheless, in some aspects, these features are characterised by a degree of consistency. Some of the characteristics of the gods are ubiquitous, such as the four faces of Brahma (Figure 89) or the lotus of Lakshmi (Figures 104 and 105). Other characteristics, like the combination of the attributes and emblems of the gods, vary from one text to another. The same tendency of “discrepancy with consistency” can be seen in practice too.

One of the main points of this research is to prove that texts do not contain strict rules to be followed by the letter, but that they constitute the theoretical base of painting and sculpture. Yet, it is argued that there are similarities between the texts and practice. While in practice each studio develops its idiosyncratic vocabulary, they all share some form of correspondence with the texts. The following examples will elucidate this argument.

Harihar Moharana, a sculptor based in Bhubaneshvar (Orissa) states that Lakshmi can be portrayed in two main ways: as Padma-Lakshmi and as Gaja-Lakshmi. Padma-Lakshmi (Figure 105) holds in her upper hands two lotuses and her lower hands are in *varada* and *abhaya mudra*. In this description Lakshmi has the same characteristics of Lakshmi for domestic worship described in the *Mayamata*. When she is represented as Gaja-Lakshmi (Figure 104), the sculptor explains that she will have two elephants in her upper hands and the lower hands will be in *varada* and *abhaya mudra*. In this case, there are only some similarities between the description of Gaja-Lakshmi provided by the sculptor and one of those of the *Mayamata*. This text explains that Lakshmi may be

depicted as having two elephants that sprinkle her from vases held by their trunks. In this form, however, the goddess has two arms and not four as described by the sculptor.

According to the same sculptor, Brahma (Figure 89) should be portrayed with four heads, to represent the four Vedas. His upper right hand is in *abhaya mudra* and the left one holds the Vedas, in his lower hands there should be on the right an *aksha-mala* and on the left a water pot. In the sculptor's description of Brahma we can identify some degree of consistency with the texts, such as the presence of the same emblems and *mudras*. However, the order in which the emblems and *mudras* are combined is different from that prescribed by the texts.

Ram Prasad Sharma, a sculptor based in Jaipur (Rajasthan), explains that an image of Ganesha should always be represented with four arms. The lower hands are always in *abhaya mudra* on the right and with the *laddus* or sweets on the left. The two upper hands can change according to wish, for example they can have an axe and a mace (Figure 107), or a lotus and an *ankusha* (Figure 108), or an axe and an *ankusha* (Figure 109), or they can both have an *ankusha*. A different view on Ganesha is expressed by Harihar Moharana. He states that, generally, Ganesha is portrayed with two hands, one in *varada* and the other with the *laddus*, and his trunk should be near the *laddus*. Where he is portrayed with four arms, he is represented with *varada* on the right and *abhaya* on the left for the lower arms, and the upper arms should hold a rope and an *ankusha*. The sculptor adds that Ganesha may also have five heads and ten arms, in which case he is represented with his wives Maya and Chaya (Figure 110). All the explanations of Harihar Moharana, however, appear different from the sole statue of Ganesha kept in his studio (Figure 111), in which the god is portrayed with an *aksha-mala* and an axe kept in the lower hands, and a broken tusk and the *laddus* in the upper hands. The texts prescribe similar emblems like the *ankusha*, the tusk, the sweet or the axe, but the order in which they are prescribed by texts and by sculptors differs. Moreover, none of the texts analysed mentions the rope, which is one of the emblems of Ganesh according to Harihar Moharana, and can also be seen in extant sculptures and paintings (Figure 99).

Thus, this chapter has once again emphasised the point that texts are not to be considered as guides to be followed literally by practising artists. The iconographical features described in this chapter represent a theoretical view on how gods should be like, and the mental images suggested are meant to work in one's mind. Due to the peculiar abstract quality of the texts, both in terms of their significance for practice as well as their lack of any definite temporality, spatiality or style, they remain *recognisable* in existing images and in the practised art of today, as seen in the work of Harihar Moharana and Ram Prasad Sharma. Our analysis of the texts also proves that the widely held view among many traditional artists that following a text would produce a repetition of features and fossilised art production is only a symptom of the misunderstanding of the spirit of the texts. This same prejudice is shared by a famous scholar like Moti Chandra (1949a, p. 67) who claims, referring to a text like the *Shilparatna*, that:

...the medieval Indian painting has lost much of the verve and technical perfection of Ajanta, but this was not due so much to the technical deficiencies of the artists as to the conventional subjects which their patrons asked them to paint and which left little scope for originality, as the figures of the gods and goddesses and the Jinas were hidebound by strict iconographic conventions, any transgression of which meant the greatest sacrilege and calamity.

The expressions "conventional subjects" and "strict iconographic conventions" used by Moti Chandra refer in fact to the literal translation of the theory into practice. This is a very restricted and inappropriate way of reading a text, which should be considered as a source of knowledge, from which an artist can develop his ideas and skills organically.

## Chapter 7

### Colours, Plaster, Brushes and the Process of Painting

This chapter analyses some technical aspects in the making of a painting. The *citrasutras* give recipes for preparing plaster, binding media, crayons and brushes, primary and mixed colours. Some of them describe very briefly the auspicious times for drawing the first sketch and the pictorial effects of shading. These technical aspects are not only relevant for the making of mural painting, but also for painting on panel and cloth.

The texts used in this study are the *Vishnudharmottara*, *Shilparatna*, *Manasollasa*, *Samarangana Sutradhara* and *Aparajitaprccha*. Other sources like the *Amshumadbhedagama*, *Kashyapashilpa* and *Jainacitra-kalpadruma* will be quoted from Bhattacharya (1976) and Moti Chandra (1949a).

Some relevant scientific studies on mural and miniature painting will also be considered in this chapter. These studies are useful for understanding the role of the *citrasutras* as well as their interpretation and application in the secondary literature. One of the most interesting elements of these studies is their juxtaposition of scientific analysis with the content of the *citrasutras* in order to prove or disprove their validity.

This chapter will also highlight that studies on colours and materials for painting, such as those of Shukla (1957), Bhattacharya (1974 and 1976) and Chakrabarti (1980), claim that painters of the past followed the texts to prepare the colours and plaster. This chapter proposes, however, that while the texts describe techniques that may have a practical use, they cannot be considered as prescriptive texts. Many practical details are missing, while the various schools of painting have all developed their own techniques based on experience and on locally available materials.

### The preparation and application of plaster on walls

The first stage in the process of mural painting is preparing the plaster. This stage is carefully explained by texts like the *Vishnudharmottara*, *Samarangana Sutradhara*, *Manasollasa* and *Shilparatna*.

The *Vishnudharmottara* states that to prepare plaster, clay should be added to brick dust in the proportion of one to three. After this, one should add bdellium<sup>1</sup> (*guggulu*), beeswax (*madhucchishtam*), an extract of *Bassia latifolia* (*madhuka*), *kunduru*<sup>2</sup> and molasses (*guda*) in equal parts, all mixed with safflower oil (*kusumbhataila*). Into that mixture, one should powder a third part of burnt plaster mixed with two parts of coarse grass (*balvaja*), and one part of hemp-fibres (*shana*). That mixture, thoroughly soaked in the slimy sugar solution, is to be left in this state for one month. After a month, this pliant plaster should be applied to the dry wall (ViDha 40-1-5 in Dave Mukherji 2001, pp. 128-129).

The *Vishnudharmottara* recommends that one should apply plaster in such a way that it is smooth, stands firm, without ups and downs and is laid neither too thick nor too thin. When the wall, smeared with plaster and levelled, becomes dry, it should be carefully smoothened by clay mixed with oil of *Vatika robusta* (*sarjataila*) and rubbed continuously and carefully with milk so as to achieve smoothness on the plaster. According to the *Vishnudharmottara*, the wall having quickly dried will never degenerate even for a hundred years. Following this method, grounds of various dimensions should be made (ViDha 40.6-10 in Dave Mukherji 2001, pp. 130-131).

The *Samarangana Sutradhara* (72.24-25) narrates the process of preparation of the ground for wall painting in the chapter called *kudya-bhumibandhana*. The first thing to be done in the process is levelling the wall. After that, the juice of any one of the following trees, *snuhivastuka* (*Euphorbia antiquorum*), *kushmanda* (*Beninkasa cerifera*), *kuddali* (*Bauhinia variegata*), *apamarga* (*Achyranthes aspera*) and *ikshuka* (sugar-cane) should be mixed with the juice of any one of the trees of *simsapa* (*Dalbergia sissoo*), *nimba* (*Azadirachta indica*), *triphalala* (*myrabolan*) and *kutaja* (*Wrightia antidysenterica*), and kept for a week. The mixture along with oceanic salt

<sup>1</sup> Bdellium is a variety of gum resin yielded by various trees of India and Africa.

<sup>2</sup> Name of a plant (*Boswellis thurifera*) or of the resin of that plant (Monier-Williams, 1994).

should be sprinkled on the already levelled wall. In accordance with the season, the juice of the *arjuna* tree (*Terminalia arjuna*), the seeds of the bean plant, the cotton-silk tree or the wood-apple should be added to the plaster. Before the application of the plaster of the thickness of the elephant skin, the wall is to be washed with water. After the application of plaster, the wall should be coated three times with a paste prepared of limestone chips. This whitening is to be prepared from the pure, clear, soft, and whitish limestone chips thoroughly ground and levigated and added with proportionate boiled rice and gum (Bhattacharya 1976, pp. 33-34).

Similarly, the *Manasollasa* (II.3.137-140) enjoins that at first the wall should be prepared with lime plaster (*sudha*). After that, the text maintains that white clay or kaolin should be collected and mixed with *vajralepa*,<sup>3</sup> and with this mixture the dry wall is to be anointed three times. Well ground conch shell lime mixed with *vajralepa* should be applied on the wall till it becomes plain (Bhattacharya 1976, p. 34).

In order to plaster a wall, the *Shilparatna*<sup>4</sup> explains that lime (*sudha*), made of conch-shell (*shankha*) burnt in wood-fire and pulverised, should be mixed up with some levigated kidney bean (*mugda*) and molasses (*guda*) in the proportion of four to one. Molasses diluted in water is to be sprinkled on it after adding some sand to this preparation. The proportion of sand should be one-fourth of lime. This mixture is to be added with *kalagni*<sup>5</sup> and banana pulp, and the proportion of this paste should be one-fourth of lime. This lime preparation is to be put into a tub and thoroughly pounded. After three months, the mixture is to be ground till it becomes as soft as butter. At that point, the wall should be properly cleaned and made even. This would be then kept wet for half a day with the juice of molasses applied on it by the tip of a fine coir-brush.

<sup>3</sup> Animal glue (see the "Preparation of binding media" section in this chapter).

<sup>4</sup> A very similar process of plastering walls to that of the *Shilparatna* is to be found in the *Sudhalepavidhana*. This text contains other topics explained by the *Shilparatna* like the making of *kittalekhani* and the preparation of colours. According to Bhattacharya (1976, p. 35) the *Sudhalepavidhana* is a late recension of certain sections of chapter 46 of the *Citralakshana* of the *Shilparatna*. This Sanskrit manuscript was first published by V.V. Sharma (1927). The text contains 46 verses and a Malayalam commentary is appended to it.

<sup>5</sup> Bhattacharya (1974, p.60) says that one of the manuscripts of the *Shilparatna* used in his study replaces the word *kalagni* with *krishnanupakka*. In that case the verse should be translated, as "This should be added with the pulp of half matured black banana". According to Bhattacharya *kalagni* means a kind of *rudraksha*, i.e. *Elaeocarpus ganitrus* or its berry used for rosary, whereas in Monier-Williams (1994) *kalagni* is the name of a particular drug or medicine.

Lime plaster should next be applied with a trowel (*darvi*). The size of the trowel is large in accordance with the requirements, and it is made either of iron or of wood and its backside should be plain. With the help of the back of the trowel, lime plaster is to be slowly applied by stages leaving no unevenness. Again, pure water should be smeared bit by bit with the help of a coir-brush, and when the water has dried, colour should be applied for the delineation of painting. This kind of lime plaster should not be used on a wooden plaque (*phalaka*) for painting. On wooden plaques, colours are to be applied after smoothening them with the help of an abrader (SR 46.14b-25 in Bhattacharya 1974, pp. 42-43).

The *Shilparatna* explains two ways to prepare white priming. The first is suitable for lime plastered walls and wooden plaques, and the second can be used on lime plastered walls and clay. In the first process, priming is prepared with conch-shell (*shankha*), oyster-shell (*shukti*) or white clay (*sita-mrd*) turned into dust and mixed with the juice of elephant apple (*Feronia elephantum* or *kapittha*) and *nimba* (*Azadirachta indica*). This is then spread on a wall or wooden plaque and subsequently the juice of the bark of *shakhotaka* (*Tropis aspera*) or that of the leaves of *ketaki* (*Pandanus odoratissimus*) should be repeatedly applied till the ground becomes very smooth (SR 46.28-30 in Bhattacharya 1974, p. 44). In the second process of priming, lime dust is to be ground in a mortar, moistened with coconut milk and thoroughly mixed with hot water (SR 46.31-33 in Bhattacharya 1974, pp. 44-45).

After whitening the wall, panel (*phalaka*) or cloth (*pata*) as resembling the surface of a mirror, the drawing of the painting should be started (SR 46.34-35a in Bhattacharya 1974, p. 45).

### **Painting on panel and on cloth**

The preparation of wooden plaques and cloth for painting is also mentioned by the texts. The *Samarangana Sutradhara* (72.36-41) describes the preparation of the ground for wooden plaques. According to Bhattacharya (1976, pp. 39-40) the text states that the seeds of the *bimba* fruit or fine *amana* rice should be collected and cooked in a pot.



Before its application on the surface of the wooden panel, this paste should be added with an astringent and lime stone powder already turned pliant with water.

According to the *Aparajitaprccha* (231.1-6), the wooden plaque is to be prepared from teakwood. Burnt bricks should be pulverised and sifted through a sieve. Wheat, powdered in a mortar, should be thrown into the buttermilk water and strained through a fine cloth. This mixture will then turn into an adhesive, as good as *vajralepa*, by heating it in a mild fire. This adhesive should then be thoroughly mixed with the already prepared brick powder and applied on the wooden plaque. This solution will stick in a month (Bhattacharya 1976, p. 40).

Bhattacharya (1976, pp. 41-42) maintains that there are two main texts that explain the technique of painting on cloth (*pata citra*), they are the *Aryamanjushri-mulakalpa*, a Buddhist text, and the *Pancadashi*, a philosophical treatise. In describing a *pata* the *Aryamanjushri-mulakalpa* states that a picture is to be painted on a new white cloth, having no fringes. It should be two hands long and one hand broad. It may be on cotton cloth or on a cloth prepared of the fibres of flax (*atasi*) or the bark of a tree, and it should be clean and devoid of any string. The painting should not be executed on silken cloth. The *Pancadashi* says that there are four stages in the course of making a painting on cloth, they are: *dhauta* or washing of the cloth; *ghattita* or rubbing of the cloth after the application of boiled rice; *lanchita* or marking of the forms to be depicted in ink; and *ranjita* or application of colour.

Since paper became an important element in painting, it started to appear in texts. A text of the Mughal period called *Bayaz-i Khwushbu 'i* (The *Sweet-Smelling Notebook*, ca. 1640) mention paper and paper dyes. This text contains the description of pigments, paper starch and varnish recipes. However, these recipes were not intended so much for professional miniaturists as for the gentlemen scholars who in that period were accomplished in those arts. Most of the pigments listed in this treatise are vegetable dyes made from flowers, fruit and nuts, and were used to tint paper for the fancy calligraphy and decorative painting used not only for poetry but also letters and legal documents (Bailey, 1997). It is believed that paper was manufactured in India from the pre-Mughal period, but there is no textual evidence for that. This craft was promoted in the reign of Akbar when the demand for paper had increased (Ohri 2001, p. 45). The

most important centres producing paper for miniature painting were Sialkot, now in Pakistan, and Sanganer and Gosunda in Rajasthan.

### Preparation of crayons

Discussions of crayons are found in the *Samarangana Sutradhara*, *Manasollasa* and *Shilparatna*. In the *Samarangana Sutradhara* and the *Manasollasa* a crayon is called *vartika*, and in the *Shilparatna* it is called *kitta lekhami*.

The *Shilparatna* explains that dust of old bricks, dried cow-dung and cold water should be pasted together. Crayons are to be prepared with this solution in the shape of a wick and their length should be of two, three or four *angulas* (SR 35b-37a in Bhattacharya 1974, p. 45).

According to the *Manasollasa* (Man II.1.144), lampblack (*kajjala*) should be pasted with boiled rice and turned into a lump. Afterwards the lump should be turned into pencil-chalks or crayons called *vartika*. The *Manasollasa* (Man II.1.142) also specifies that the first drawing is to be made either with *vartika* or with *tinduka* or style. As regards the preparation of *tinduka* the text says that a stick of the measure of four *angulas* and having the circumference of a little finger, should be selected from among the solid bamboos. At the end of the stick should then be pegged a pin, whose projecting part should be of one *yava* (Bhattacharya 1976, pp. 48-49).

A more elaborate formula for the preparation of a *vartika* or crayon may be found in the *Samarangana Sutradhara* (SamSut 72.1-9). The text explains that earth is to be collected from a place like the interior of a thicket, the bank of a stream with lotuses, the mountain caverns, tanks in a forest or the root of big trees. The earth collected from these places is found to be fine, pliant, soft, pale, saltish and durable. This earth should be turned into a paste and added with boiled rice. For the purpose of imparting hardness to crayons, the proportion of the boiled rice would vary according to seasons, one-seventh in the summer, one-fifth in the winter, one-sixth in the autumn and one-fourth in the rainy season. It is further enjoined that the tip of a crayon should be of the shape of a snout of rice or the beak of a cock. As regard the size, for an apprentice a crayon

should be two *angulas* in measure, but for drawing lines on walls and cloths it should be three and four *angulas* long, respectively (Bhattacharya 1976, p. 48).

### First sketch

The *Vishnudharmottara* and the *Shilparatna* mention the auspicious moments for painting. In particular, the *Vishnudharmottara* explains that when the wall dries up, on an auspicious lunar day, under positive asterism, especially when the moon is in Citra, when with due procedures the painter has made offerings to *brahmans* and his teacher, and after having wished them well and bowed before them, the self-composed artist should begin to paint. He should be dressed in white garments, face the east, meditate upon his deity and he may begin to paint. After sketching first in white, then brown and finally in black paint, the painter should mark out the proportions and the postures. Afterwards, he should paint with colours, each according to the right place (ViDha 40.11-14 in Dave Mukherji 2001, pp. 132-133).

The *Shilparatna* states that gods, men, animals, reptiles, birds, trees and creepers, mountains and seas are to be drawn in crayon (*kitta lekhami*) in an auspicious moment. When the drawing (*lekha*) becomes incorrect, it should be thoroughly erased with a piece of new cloth, and carefully redrawn to improve the respective figures (SR 46.37b-40 in Bhattacharya 1974, p. 45).

### Brushes

Texts classify brushes according to their size. *Tulika* and *lekhami* appear to be the general names for brushes, except for the *Samarangana Sutradhara* (SamSut 72.12-22) which uses the word *kurca*.

The *Shilparatna* mentions three types of brush (*lekhami*); they are flat (*sthula*), medium (*madhyama*) and fine (*sukshma*). The extremity of the stick of a brush should be made either eight sided or round, and then a very hard and barley corn shaped iron peg of half an *angula* should be placed at its end. Hairs from the ear of a calf should be collected for a flat brush, from under the belly of a goat for a medium one, and from the

tail of a muskrat or tips of grasses for a fine one. They should be tied to the peg with the help of a thread or lac (*laksha*). For each colour there should be three shades, and the shape of the brush is again, of three types, hence for each colour there should be nine brushes. The medium brush is prescribed to draw a line in yellow on the wall just along the outside of the first sketch in crayon and, then, erasing the crayon line, that should again be drawn in red ochre (SR 46.53-60 in Bhattacharya 1974, p. 47).

Classification of the brushes on the basis of their thickness and thinness, and the role they play in delineating a painting, may also be found in the *Manasollasa* (Man II.1.145-148). Referring to the brush as *lekhani*, the text states that it can be of three types, *sthula* or broad, *madhya* or medium and *sukshma* or fine. The broader type of brush has been prescribed for filling in of the ground with colour. It is advised that such a brush should be wielded in a slanting manner. One should paint with a medium size brush controlling its point as well as the sides. An expert in painting draws the minute lines with the help of the point of a fine brush. The text prescribes that for the manufacture of brush, hairs from the ear of a calf are to be carefully collected. They should thereafter be placed along with a little lac-resin, at the top of a brush-stick (Bhattacharya 1976, pp. 50-51).

The *Samarangana Sutradhara* (SamSut 72.12-22) distinguishes different types of brush. Among them are the *kurca* type shaped like the sprout of a banyan tree, the *hastakurca* like the sprout of an *ashvatta* tree (*Ficus religiosa*), the *bhasakurca* like the sprout of a *plaksha* tree (Indian fig), and the *callakurca* like the sprout of the *udumbara* tree (*Ficus glomerata*). It is enjoined that the broad lines are not to be drawn with a brush having the shape of the sprout of a banyan tree, fine lines are not to be executed with the help of a brush shaped like the sprout of a *plaksha* tree and the application of white priming (*lepyakarma*) should be made with a brush having the shape of the sprout of an *udumbara* tree (Bhattacharya 1976, p. 50).

### **Preparation of binding media**

The binding medium plays a very significant role in the process of preparing the ground and in fastening colours on that ground. The *citrasutras* mention both animal and

vegetable sources for the preparation of binding media. A very common word that denotes binding medium is *vajralepa* (adamantine medium), which is an animal. The *Brhat Samhita* (57) and the *Vishnudharmottara* (III.92.1-16) give the recipes of different *vajralepas* which were used in stone and brick buildings, in constructing walls and to fix idols in temples. Among the texts that refer to glues to be used for painting purposes are the *Vishnudharmottara* and the *Shilparatna*.

In the chapter on colours, the *Vishnudharmottara* (III.40) mentions the use of both animal and vegetable glues. Among the binding medium referred to in the *Vishnudharmottara* are the decoction of leather with the extract of *bakula* tree, and the milk of *sindura* tree which is recommended for all colours. The text also states that a painting that has been astringed by a hog's tail tied together by a cloth dipped in the juice of *matanga* and *druva* grass is never destroyed even by water and lasts for many years (ViDha 40.29-30 in Dave Mukherji 2001, pp. 138-139).

The *Shilparatna* explains that for the preparation of *vajralepa*, fresh buffalo-hide should be collected and boiled in water till it melts and becomes as soft as butter. This should then be turned into globules and dried under the strong heat of the sun. It should be placed in hot water and, when diluted, mixed up judiciously with different colours. *Vajralepa* can be used instead of gum secretions of the elephant apple (*kapittha*) and the *nimba* tree (SR 46.132b-135a in Bhattacharya 1974, pp. 56-57).<sup>6</sup> The *Shilparatna* (SR 46.51-52, 118-122) also refers to the exudation of plants. It mentions gum as an adhesive employed in the preparation of colours, the exudation of *nimba* used for lampblack, red ochre, red lead and realgar, and the exudation of elephant-apple (*kapittha*) for *shyama-dhatu* (see the section "Dark colours"). The exudation of *kapittha* is also employed to be overspread on wall and panel (Bhattacharya 1976, p. 89).

### Introduction to primary colours

The concept of primary colour in the *citrasutras* is not a fixed one. Each text seems to develop its own notion and a different number of these colours. The *Shilparatna* and *Vishnudharmottara* distinguish five primary or pure colours (*shuddha varna* or *mula*

*ranga*); they are white (*sita-varna*), yellow (*pita-varna*), red (*rakta-varna*), black (*kajjala*) and *shyama* (*shyama-varna*)<sup>7</sup> (SR 46.26 in Bhattacharya 1974, p. 44; ViDha 40.16-17 in Dave Mukherji 2001, pp. 134-135).

The *Manasollasa* (Man II.1.156-157) records the primary colours as four in number;<sup>8</sup> they are white, made of lime; red, which can be of three types (crimson red made of the red lead, blood red made of the juice of lac and red ochre); these are followed by yellow orpiment and black of lampblack (Bhattacharya 1976, pp. 53-54).

According to the *Kashyapashilpa* and the *Amshumadbhedagama* (Bhattacharya 1976, p. 68), two South Indian sources, there are sixteen colours, four varieties each of white, red, yellow and black/blue (see table XVIII). These colours are called independent colours (*svatantra*) and they will be explained in the next sections.

From this discussion it is evident that the concept of primary and secondary colour of the *citrasutras* is very different from the Western one, in which yellow, red and blue are the only primary colours and secondary colours are derived from mixing the primary. Chakrabarti (1980, p. 43) maintains that the Indian conception was not very clear, because they considered to be primary the colours obtained as pure or unmixed and not the three basic colours from which all other shades can be produced. He also states that: "The authors themselves were sometimes confused on this particular point." However, the Indian list of primary colours is very practical and seems to be based on the availability of minerals and plants in situ (except the lapis lazuli). The colours available in nature were called primary, or pure (*shuddha*) and root (*mula*) colours. From these, it was possible to obtain secondary colours called mixed or *mishra* colours. This would explain why white and black are included in the Indian list of primary colours. Black from lampblack and white from conch-shell were easily available and were mixed with other minerals to create secondary colours. In the *Shilparatna*, green derived from terre verte, which would be a secondary colour from the Western point of view, is instead a primary colour for the Indian perspective. However, the green colour

<sup>6</sup> The *Manasollasa* (II.3.132-136) contains a similar recipe.

<sup>7</sup> *Shyama varna* is differently treated by scholars. Bhattacharya (1974) identifies it with terre verte or green earth, whereas Dave Mukherji (2001) translates it as blue.

<sup>8</sup> Four are the primary colours also for the *Natya Shastra*. They are: white, blue, yellow and red (23.69 in *The Natya Sastra of Bharatamuni* 2000, p. 315).

becomes secondary in some other texts in which this is derived from mixing blue and yellow.

Primary colours are summarised by the following table.

**Table XVIII**  
**Primary Colours**

Texts	Primary Colours
<i>Shilparatna</i> and <i>Vishnudharmottara</i>	white, yellow, red, black, <i>shyama</i>
<i>Manasollasa</i>	white, yellow, red, black
<i>Kashyapashilpa</i>	white of four types: <i>shveta</i> , <i>shukla</i> , <i>dhavala</i> , <i>avadata</i> yellow of four types: <i>svarna</i> , <i>pishanga</i> , <i>pita</i> , <i>harita</i> (green) red of four types: <i>aruna</i> , <i>rakta</i> , <i>shona</i> , <i>patala</i> black/blue of four types: <i>nila</i> , <i>shyama</i> , <i>kala</i> , <i>krshna</i>

### White

White colour is introduced in the *citrasutras* with a description of its shades and sources. The *Kashyapashilpa* (Bhattacharya 1976, p. 58) explains that there are four distinctive shades of white: *shveta* is the colour of the pearl, *shukla* is the colour of conch shell, *dhavala* is the colour of silver or milk and *avadata* is the colour of a star.

The *Manasollasa* (Man II.137-139) and the *Shilparatna* (SR 46.28) contain information on the process of obtaining white colour. Both texts say that white clay or kaolin and lime (*sudha*) prepared from burnt conch, oyster or other shells, are the main sources of white pigments (Bhattacharya 1979, p. 57).

An interesting account on white and other colours is found in the *Jainacitra-kalpadruma* (Moti Chandra 1949a, pp. 85-88). This text lists a number of traditional colours together with some new materials, such as zinc-white, employed in the illustration of western Indian manuscripts, Rajasthani and Mughal painting.

## Red

The *citrasutras* distinguish different kinds of shades and sources for red colour. The *Kashyapashilpa* and *Amshumadbhedagama* mention that there are four shades of red, they are: *aruna*, *rakta*, *shona* and *patala*. *Aruna* is the colour of the blood of the hare, *rakta* is the colour of the China rose, *shona* is the colour of the *kimshuka* flower (*Butea frondosa*) or the colour of a parrot's beak, and *patala* is like the colour of lac juice or *laksharasa* (Bhattacharya 1976, pp. 62-63). According to the *Shilparatna* (SR 46.118b-119), the materials for the preparation of red are red lead (*sindura*) for soft red (*mrdu-rakta*), red ochre (*gairika*) for middle red (*madhya-rakta*) and the juice of lac (*laksharasa*) for a deep red (*ati-rakta*).

Red ochre (*gairika* or *geru*) seems the most popular among the red sources for its easy availability. The presence of red ochre in the palette of the Indian painter may be noted as an invariable feature in the case of both murals and miniatures (Bhattacharya 1976, p. 59). Chakrabarti (1980, p. 48) explains that it is obtained from the natural earth which contains silica and owes its colour to iron oxide. The *Shilparatna* (46.120b-124a) states that red ochre should be thoroughly ground for a whole day in a grinding stone with a hammer or a similar implement. The colour may be obtained by washing the powder in pure water.

According to the *Shilparatna* (SR 46.120b-124a), red lead (*darada* or *sindura*<sup>9</sup>) should be ground for twelve hours along with water and after five days, again for a full day. After that it should be kept in a suitable receptacle. The *nimba* gum should be added to it as a medium (Bhattacharya 1976, pp. 59-60). Chakrabarti (1980, p. 49) explains that this kind of colour was not used in Indian murals because the substance it is derived from is poisonous and causes the alteration of the tone of the colour.

Vermilion or crude cinnabar (*hingula*) is mentioned in the *Vishnudharmottara* (ViDha 40.26) as a source of red. Chakrabarti (1980, pp. 49-50) explains that this is a red mercuric sulphide. This colour is poisonous and liable to alteration. It is obtained from nature as the mineral cinnabar, which is the principal ore of mercury. It is however



only the *Jaina-citrakalpadruma* that preserves the recipe for its preparation. The crude cinnabar is thoroughly levigated in a mortar with sugared water or lime juice. Then the cinnabar is allowed to settle and the yellowish water is carefully drained off. The process is repeated fifteen times, or even more, to obtain purest cinnabar. It is again levigated with sugared water or lime juice and gum and after being thoroughly mixed, it is formed into tablets and dried (Bhattacharya 1976, p. 60).

Red lac (*laksha rasa*) is mentioned by *Vishnudharmottara* (40.26), *Manasollasa* (II.1.156) and *Shilparatna* (SR 46.119). It is prepared from a material that is known as lac and it is a dark resinous incrustation produced on certain trees by a certain type of insect. This material is also mixed with other colours to produce various shades. The *Jainacitra-kalpadruma* gives the following method for preparing it. Red lac resin is to be mixed in boiling water stirring all the time to prevent the solidification of the resin. After this the temperature of the water should be raised and at the interval of every ten minutes the powder of the lode and borax should be thrown in. The concoction is then taken down from the fire, and after the water has dried up the residue is used as colour (Bhattacharya 1976, p. 61).

Realgar (arsenic disulfide) or red arsenic (*manahshila*) is similar to orpiment and has an orange-yellow hue. The *Shilparatna* (SR 46.120b-124a) states that the realgar is reduced to fine powder and *nimba* is the medium for it. Realgar should be pulverised in a grinding stone and kept in water for five days, and then it should again be pasted for a day and collected in a vessel. Proportionate *nimba* gum should be added and mixed to the pigment for the purpose of painting (SR 46.118b-124a in Bhattacharya 1974, p. 55).

## Yellow

The *Kashyapashilpa* introduces yellow by saying that there are four distinctive shades of this colour: *svarna* (golden), *pishanga* (tawny), *pita* (yellow) and *harita* (green) (Bhattacharya 1976, p. 64).

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<sup>9</sup> *Sindura* appears to be a controversial word. According to Bhattacharya (1976) it means red lead whereas for Chakrabarti (1980, p. 49) this is vermilion called also *hingula*. The right word for red lead according to Chakrabarti would be *darada* or *lohita*.

For the preparation of yellow, *haritala* or orpiment (arsenic trisulfide) has been recommended as a source material by the *Manasollasa* (II.1.157), the *Vishnudharmottara* (40.26) and the *Shilparatna* (SR 46.41-46), which names it *pita-varna-dhatu*. The *Shilparatna* gives a detailed description of its preparation. This yellow ingredient, found in mountains, riverbeds and other places, is to be collected, washed in pure water and pulverised. It should be gently ground on stone and then be agitated in a jar full of pure water. Leaving the sediments suspended below, the water containing pigment is to be shifted to another jar and the process should again be followed. This process is to be repeated as long as necessary for removing impurity and, thereafter, the pigment is to be dried under the summer sun (SR 46.41-46 in Bhattacharya 1974, pp. 45-46).

Another source of yellow, found in the *Jainacitra-kalpadruma* and mentioned by Moti Chandra (1949a), is *peori*. *Peori*, also called Indian yellow, was made from a concentrated extract of urine of cows fed entirely on mango leaves. The urine was dried and formed into lumps which were reground before use. The resultant material is the magnesium or calcium salt of euxanthic acid (Johnson 1972, p. 141). This process of making *peori* was not healthy for the cows and in the 19<sup>th</sup> century this colour was replaced by chrome (Delamare and Guineau 2000, p. 81). However, many painters in Rajasthan today still have stocks of this pigment, which is used in miniature painting.

### Dark colours

The expression “dark colour” is used here following the spirit of the texts, like the *Kashyapashilpa* which mentions four dark shades of colour, they are: *nila*, *shyama*, *kala* and *krshna*. *Nila* represents the shade of the cloud, *shyama* that of a forest crow, *kala* that of a peacock and *krshna* the colour of the wing of a black bee (Bhattacharya 1976, p. 65).

The *Manasollasa* (Man II.1.157) enjoins *kajjala* or lampblack for *krshna* or black colour<sup>10</sup> (Bhattacharya 1976, p. 64). The *Shilparatna* explains that for its preparation a

<sup>10</sup> *Krishna* is here considered as meaning black, but it should be remembered that this word is controversial. According to Monier-Williams (1994) it could mean ‘black, dark, dark blue.’

lamp with oil and a lengthened wick should be lit. An earthen pot should then be brought and, after having besmeared its inside with fine cow dung dust, it should be placed upside down over the flame of the lamp. The lampblack (*kajjala*) born of the wick of the lamp, and sticking inside the pot, is to be carefully collected and smeared on an earthen vessel. Collecting it again and adding pure water to it, this is to be pasted and fully dried. Lampblack should then be added with the *nimba* gum, levigated and dried up again (SR 46.47-51 in Bhattacharya 1974, p. 46).

Another colour substance referred to in the *Shilparatna* is *shyama dhatu*. *Shyama* is a controversial word which stands for a deep shade covering black, brown, deep green and deep blue. This substance is identified by Bhattacharya with terre verte, a very popular colour in Indian painting. *Shyama-dhatu* should be ground along with pure water for three hours and again be pasted after adding the gum of elephant apple and be dried up (SR 46.52 in Bhattacharya 1974, pp. 46-47). Apart from *shyama dhatu* there is no reference in other texts to any material from which green could have been obtained. Instead, it is found that almost all the texts refer to green as a secondary colour produced by combining blue and yellow (Bhattacharya 1976, p. 67).

Two sources of blue, organic and inorganic are mentioned in the *citrasutras*. The *Vishnudharmottara* refers to *nila* (indigo) and *rajavarta* (lapis lazuli). The *Manasollasa* (Man II.1.161-162) mentions *nila* as having the hue of the blue lotus and *rajavarta* as having the hue of the *atasi* flower (flax). Indigo is not only used as a dye but the colour extracted from this plant is well known in the illustrated palm-leaf manuscripts of Bengal, Nepal and Western India (Bhattacharya 1976, p. 66). According to Moti Chandra (1949a, p. 82) it seems that lapis lazuli or more probably the ultramarine pigments extracted from them, were imported from Persia or from Afghanistan.

### **Mixed or secondary colours**

Secondary colours are introduced according to three main textual sources: the *Vishnudharmottara*, the *Shilparatna* and the *Manasollasa*. The *Vishnudharmottara* states that secondary colours are derived by combining primary colours using one's imagination and discretion. The text explains the colours taking the example of green.

Green is said to be the combination of blue and yellow and it could be of the pure or mixed type. The mixed type can be a shade when augmented with black or a tint when mixed with white. The tint is of three types depending on whether white is added to the colour in greater, lesser or equal proportion. Such a method results in beautiful variations of green such as greenish yellow like the *durva* grass and yellowish green like the wood-apple. A shade too is three fold according to the amount of black added to the colour in more, less or equal proportion (ViDha 40.18-22b in Dave Mukherji 2001, pp. 134-137).

Also the *Shilparatna* (46.135b-144 in Bhattacharya 1974, pp. 57-58) focuses on the description of the combination of one colour with another. However, it explains that this should not be done on the walls white washed with lime.<sup>11</sup> The *Shilparatna* offers the following comments on secondary colours:

- White mixed with red shows a fair rosy colour (*gauracchavi*)
- White, black (*krshna*) and yellow, mixed in equal proportion, yield a green shade (*sharacchavi*)
- White and black (*krshna*) mixed in equal proportion show the colour of an elephant
- Red and yellow mixed in equal proportion yield the colour of *bakula* fruits (*Mimusops elengi*) or the colour of flame
- Red with yellow in the proportion of two to one yields bright red (*ati-rakta*)
- The mixture of yellow and white in the proportion of two to one is known as *pingala* (yellow or golden colour)
- Yellow mixed with black (*krshna*) in the proportion of two to one yields the colour of water
- The result of the combination of black (*krshna*) and yellow in equal proportion produces the colour of the human body

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<sup>11</sup> This affirmation of the *Shilparatna* reveals that there was a great understanding of colours and the way to use them in mural painting. Only mineral colours are lime resistant and suitable for mural painting. Moreover, as Chakrabarti (1980, pp. 38-39) points out, some mineral colours when mixed with certain colours react and make them dull or darkened. The selection of proper colours for mural painting is therefore important because only proper natural colours are to be used in wall painting, particularly when lime is used either in plaster or in priming.

- Yellow orpiment mixed with deep green (*shyama*) produces the colour of the wing of a parrot
- Lac-dye mixed with vermilion yields a bright red
- Lac-dye with black (*krshna*) shows the colour of *jambu* fruit
- Lac-dye, nutmeg (*jatilinga*, i.e. the hard seed of the *Myristica fragrans* tree) and white, mixed in equal proportion, produce an excellent colour (*uttama*) and may also be added with vermilion
- Black (*krshna*) mixed with blue (*nila*) shows the colour of hair

This list is not only a technical description on how to mix colours, but it involves the imagination of the reader, who is invited to think of a particular colour visualising fruits, flowers or things of that colour. Also the *Manasollasa* (Man II.1.161-164; Bhattacharya 1976, p. 73) contains a list of secondary colours described in the same way:

- Cinnabar mixed with conch-shell lime produces a red lotus hue
- Red ochre mixed with conch-shell lime gives the shade of smoke
- Orpiment mixed with conch-shell lime gives the colour of saffron
- Lampblack mixed with conch-shell lime produces the shade of smoke
- Indigo mixed with conch-shell lime produces the pigeon colour
- Indigo mixed with orpiment produces a green colour
- Lampblack mixed with red ochre produces a dark brown shade (*shyamavarna*)
- Lampblack mixed with lac-dye produces the shade of *patala* flower
- Lac-dye mixed with indigo produces the deep purple of the *jambu* fruit.

### Gilding and metals

The *Vishnudharmottara* and the *Shilparatna* introduce the metals to be employed in the process of painting. The *Vishnudharmottara* states that the metals to be used in painting are gold (*kanaka*), silver (*rajata*), copper (*tamra*), mica (*abhraka*) and tin (*trapu*). The metals are either spread out in foils or liquefied. Mica when added to impervious metals acts as a liquefier, thus the metals become fit for painting (ViDha 40.25-29 in Dave Mukherji 2001, pp. 136-139).

The *Shilparatna* mentions two systems for the application of gold on painting: one with gold powder mixed with *vajralepa* and the other with gold leaves. The first method, very similar to that of the *Manasollasa* (II.1.171-177), enjoins that before grinding gold, it should be turned into thin and soft leaves and those leaves should be very minutely fragmented, and mixed up with a small quantity of sand and clean water, and then ground in a mortar. This well-ground powder is to be put into a pot and after pouring some water into it, the pot should be shaken so that the sand will rise above the gold. After the removal of dirt and sand, the gold will become very bright. This gold is to be carefully pasted with proportionate glue (*vajralepa*) and applied by the expert with a brush suitable for the purpose. When dried up, it should be slowly rubbed with the tip of a boar-tusk till the gold glitters. Alternatively, the second method states that the places meant for gilding is to be smeared with glue and extremely thin gold leaves should be laid very steadfastly on them in accordance with the requirements. Again, the gold should be brightened by rubbing (SR 46.124b-132a in Bhattacharya 1974, p. 56).

### Pictorial Effect

The *Vishnudharmottara* and the *Shilparatna* spend a few lines explaining the pictorial effect of colours such as shading and the use of lines in painting. The *Vishnudharmottara* says that there are three types of line rendering (*vartana*); they are *patraja* (leaf born), *acchaidika* (unbroken) and *binduja* (dot born). The *patraja* type of line rendering is drawn by lines that are partly drawn and partly undrawn; *acchaidika* type is said to be extremely fine; and a *binduja* type employs dotting (Figure 112) (ViDha 41.5-7b in Dave Mukherji 2001, pp. 158-161).

The *Shilparatna* explains that an expert painter should fill in colours slowly and spotlessly with a flat brush in order to achieve the special effects of depressions and protrusions. Everything should be made to appear pleasing by the differentiation of darkness and brightness and of hardness and softness. In application of an individual colour, the effect of thickness is dark and that of thinness is bright. This effect is also achieved by using different colours. Where yellow stands for the bright, red would be

dark. The borderline should be carefully drawn in lamp-black (*kajjala-varna*) with a fine brush<sup>12</sup> (SR 46.113-117a in Bhattacharya 1974, pp. 54-55).

### Scientific analysis of painting and its use in secondary literature

Many scientific analyses have been carried out on mural and miniature paintings. Some of these studies will be taken into consideration in this section to see how they can help us to understand the technique of painting used in the past and the role played by the *citrasutras* in the study of the painting process. In this section we will also see how scientific studies have been used together with textual evidence to prove or disprove the validity of the texts. As discussed in chapter 1, many scholars considered the technique of mural painting to be directly influenced by texts. This approach is present from the very beginning of the study of the *citrasutras*. Stella Kramrish (1924), Shukla (1957) and Chakrabarti (1980) tend to associate the *Vishnudharmottara* with the murals of Ajanta. Shukla (1957, p. 107-108), for example, suggests that:

Here [in Ajanta] the line (*rekha*) and modelling of forms, as well as the principles of *kshaya* and *vrddhi* are all followed and deeply worked out...The *varatana*, the delineation of light and shade of the canonical treatises like the *Vishnudharmottara* was the rule of these paintings at Ajanta.

In the same way, Bhattacharya (1974 and 1976) associates the *Shilparatna* with the murals of Kerala. One of the peculiarities of his study is that he employed scientific analyses of painting to strengthen his position. Bhattacharya in fact used scientific analyses of south Indian murals, carried out by Paramasivan (1939), to prove that Kerala painters literally followed the *Shilparatna*.

The study of Paramasivan examines many examples of South Indian murals (Figure 23) including those of Kochi, Padmanabhapuram, Lepakshi, Somapalayam and Tirumalai. Paramasivan studied micro sections of the ground and concluded that at Kochi and Padmanabhapuram the ground was prepared out of lime plaster with lime and sand as the principal components; at Lepakshi and Somapalayam, the ground was similarly prepared out of lime plaster with lime and sand as the principal components

<sup>12</sup> It may be noted that the use of a black border for the figures is a characteristic of many traditional Indian paintings (see for example figures 86, 87 and 88).

but silica was also present; and at Tirumalai the plaster was prepared out of lime and silica as the principal components. The pigments identified by Paramasivan in these frescos are yellow ochre, red ochre, terre verte, carbon and lime, and only lime had been used to serve as a binding medium. He also observed that the pigments have not infused into the plaster ground or spread beneath the stucco surface denoting that the paintings have been done in lime medium or with the technique of fresco *secco*.<sup>13</sup>

The *citrasutras* do not need to be validated by scientific studies because they are the Indian traditional authorities on the subject, and the fact of accepting them as authorities or not is an arbitrary decision and does not depend on the practice of painting of any school. However, this approach of mixing scientific studies with traditional knowledge was adopted by Bhattacharya to prove his thesis that there is a clear correlation between the 16<sup>th</sup> century *Shilparatna* and the 16<sup>th</sup> century murals of Kerala. He (1974, p. 28) declares:

It is...in technical aspects, covering material, method and composition, that the correlation between the text and the murals appears to be very much clear. A somewhat detailed discussion of the results obtained by S. Paramasivan in his investigations into the methods of mural painting in Kerala would clarify the extent of dependence of the Kerala painters on the experiences of the earlier masters recorded in the *Citralakshana*.

Using as a proof the study of Paramasivam, Bhattacharya also asserts that the recipes of the *Shilparatna* were followed by the painters of Kerala (1976, p. 78):

Finally, it may be noted that the colour schemes of Indian paintings belonging to the ancient and medieval ages testify to the authenticity of the canonical texts, which, as it appears from their reliable recipes, were nothing but artist's manual to be followed by the painters through the generations.

Bhattacharya, however, finds some problems in proving his position especially when yellow ochre, one of the pigments used in Kerala painting according to Paramasivan, finds no place in the *Shilparatna*. To solve the problem, he finds an answer to this question stating that (1976, p. 70): "...the law-makers on painting

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<sup>13</sup> Fresco *secco* is a technique in which a painting is executed on a dry plastered wall. This is different from fresco *buono* in which the painting is executed on a wet plastered surface. Both techniques imply the use of a purpose made plastered wall as carrier for painting. These two processes are different from mural painting, which simply implies a painting on any wall (interview with Kripal Singh in Jaipur, October-November 2002).



covered both yellow ochre and red ochre by the word *gairika*...". Bhattacharya thus widens the meaning of the word *gairika* so that it can fit the findings of Paramasivan.

Another misinterpretation and misguided application of the texts is to highlight their alleged 'mistakes,' comparing their content to scientific analysis. This seems to be the approach adopted by Purington and Newman (1985).<sup>14</sup> One of their purposes was to check the accuracy of the *citrasutras* (p. 107). This presumes that the *citrasutras*, when compared to Western scientific analysis, cannot per se be seen as an authoritative source. Their study examines examples of painting of different periods and schools in order to detect the sources for pigments, and check if the colours mentioned in the texts were used in practice. Among the paintings used in this study are an example of the *Bhagavata Purana* from the Delhi-Agra area, dated circa 1520-30 (Figure 113); Mughal paintings such as an example of *Hamzanama* and one representing the *Darbar of Akbar II* (dated between 1811-1815) (see Figure 114 for an example of late Mughal painting); a painting representing the *Hindola Raga* from Mandi (Figure 115); the *Maharaja of Nathdvara* from Kota dated circa 1830 and the *Festive Procession* from Jaipur dated 1833 (Figure 116). Among the colours detected were white lead, carbon blacks, red lead, vermilion, and also an organic red pigment. *Peori* and orpiment were used but never together. Verdigris, and not terre verte, was used as a green pigment produced by copper corrosion. This was used for example in the painting of the *Hindola Raga* (Figure 115). Among the blue pigments, very common was indigo, whereas the ultramarine was used in Mughal paintings (Figure 114), in the *Festive Procession* (Figure 116) and *Hindola Raga* (Figure 115). Azurite was not used. Many colours were achieved by combining two or more pigments. The flesh tone of one of the attendant figures in the *Hindola Raga* painting (Figure 115) was found to include ultramarine, *peori*, white lead, red lead and carbon black. Powdered metals like gold and silver were used and when mixed with other pigments, the metal added a shimmering effect to the colour. The example of the *Bhagavata Purana* (Figure 113) shows a very restricted palette: here white lead, red lead, vermilion, orpiment and indigo were used. The *Hindola Raga* (Figure 115) is the painting in which more pigments were used: they are

<sup>14</sup> Among the other scientific studies on miniature painting are for example Isacco and Darrah (1993) and Johnson (1972).

lead white, carbon black, red ochre, red lead, vermillion, organic red, *peori*, verdigris, ultramarine, indigo, gold metal and silver metal. After this analysis the conclusion was obvious: these paintings contained some but not all of the pigments described in the texts, and some of the pigments mentioned by the texts were not used in practice.

In the study by Purington and Newman the texts were used as a blueprint to prove the validity of the texts themselves, which, in the eyes of the authors, appear like defective compilations, when compared to Western scientific analysis. However, this is not the way of using a *citrasutra*. A text may detail recipes and possibilities of using colours, but it is only the skill of the artist that can discern which colour may be appropriately used and how in any given context. One of the peculiarities of the texts is that of giving numerous recipes without explaining whether the colour may be used in mural or in miniature and cloth painting. What is not stated by the text is the use of colours which was, and is, well known by practitioners. For example, Kripal Singh (Jaipur) explains that lac, mercuric sulphide (cinnabar), malachite and cochineal are not suitable for murals but can be used only in miniature or cloth painting, whereas Indian red (*hirmaji* or iron oxide), red and yellow ochre and terre verte are generally used in fresco. He also explains that lapis lazuli and azurite are not used in fresco *buono* as they can be used only when the plaster is dry. This explanation shows that painters were acquainted with the use of colours and for example explains why terre verte is never used in miniatures. The use of a colour can be understood by the experience of the painters, and the text is not a guide that proves the validity of their experiences but it can be considered as a collection of possibilities in the use of colours that in practice may or may not be seen.

In this study we can also argue that the choice of paintings was not appropriate. In particular Purington and Newman did not explain how the *Vishnudharmottara* might have been relevant to Mughal painting, which notably for technique and colours owes much to Persian painting and to later developments in the uses of colours. In fact what can be evinced by their study is that from the *Bhagavata Purana* series of painting to Mughal painting there has been a great evolution in the use of colours. This evolution however was not produced by following one text or another but was due to changes in patronage, adoption of new colours and techniques and the adaptation of painters to new

needs and fashions. For example, Isacco and Darrah (1993), in their study of Indian miniature painting, maintain that paintings belonging to the same series, school or period have consistently similar features but they are also open to change. When new colours appear, they are generally seen first as exceptions, then the exceptions become more frequent until they are a rule. In this way, many new materials for pigments were introduced in miniature painting together with those traditionally used. For example the paintings analysed by them shows that for blue colour, in later Mughal and Rajasthani painting, together with the ultramarine and indigo were introduced azurite, smalt, a potash glass tinted with cobalt oxide, and Prussian blue, a synthetic pigment manufactured in the eighteenth century.

One possible use of a scientific analysis is to understand the base technique of mural or miniature paintings. This for example is the case of the analysis of the mural paintings at Ajanta (Figure 117) carried out by Ghosh (1987, pp. 53-55) who leaves aside textual evidence to proceed to develop an understanding of the technique and materials used by the painters. He explains in his analysis that the ground of the painting at Ajanta is composed of mud plaster containing vegetable fibres, paddy husk, grass and other organic materials and rock grit or sand. The pigments detected by Ghosh are yellow and red ochres, lampblack, white derived from kaolin, lime and gypsum, and green from terre verte. He also states that the pigments were used along with mixtures of these in various shades. This kind of analysis permits us to understand that, in terms of technique, Ajanta murals represent a clear example of the adaptation of the artists to the locally available materials (except blue from lapis lazuli) and to a skilful use of all of them. Also the way in which the ground and plaster were prepared does not follow the recipe of the *Vishnudharmottara*, but clearly shows the adaptation of the artists to the materials found in situ. Texts offer a multitude of options but in practice the choice of colours did not depend on following a text but on local availability and ideals of the time. The texts do not teach painters to use a colour instead of another, nor do they say in what case to use them, but leave their application to the choice and skill of painters.

## Conclusions

As we have seen in the last section, the widespread idea of considering texts related to a particular period of time or to a particular school is evidenced by the frequent juxtapositions of concepts of a text like the *Vishnudharmottara* to the mural painting of Ajanta, both belonging to the Gupta period, or of the *Shilparatna* to the fresco painting of Kerala. This idea is also shared by Sharma (1927) the translator of the *Sudhalepavidhana*. He believes that texts were guides for painters and in his article he ingeniously states that his translation of the *Sudhalepavidhana* will be of interest to those who wish to revive the old art of mural painting of Kerala that is about to disappear.

The view of considering texts as prescriptive guides, however, could not be proved satisfactorily even using scientific analysis. In terms of materials employed in mural painting, we have seen that each school or each place presents a different composition of the plaster and none of them correspond literally to a text. This tells us that theory and practice can be considered as two *views* on the preparation of plaster. In my interview with Kripal Singh (Jaipur), an expert in Indian fresco painting, he commented that while the *citrasutras* are old compilations, their recipes may work in practice. However, he also adds that this requires proper reading of the texts. He explains that the *Samarangana Sutradhara* (72) mentions, for the preparation of plaster, a number of plants from all over India, but that it was only the skilled painter who knew exactly which one to use. The use of a plant also depended on regional availability. This suggests that the texts cannot be seen as definitive guides but rather presuppose that painters know how to select and employ the right plants for the preparation of plaster.

One of the big discrepancies between text and practice is that the texts only consider fresco *secco*. However, fresco *buono* is also a widely used technique in India. For example, Kripal Singh says that the figure of a *bodhisattva* at Bagh (c. 6<sup>th</sup> century) is made with this technique. He explains that this figure is painted on a thick layer of plaster and according to its size it took a day to be painted. Now it is completely ruined, but Kripal Singh considers it as a proof of the existence of fresco *buono* in ancient India. If this were true it would prove that fresco *buono* is not a technique imported from abroad, as commonly believed. Fresco *buono* technique is commonly used in

Rajasthan, where it is called *ala gila*. Examples of fresco *buono* are to be found in the Shekhavati region (Figure 118). Here, according to Cooper (1994, pp. 75-79) two methods of painting were adopted. For the fine work inside buildings a *tempera* technique, in which gum was used as a medium, was adopted, and on parts of the outer walls and for the dado of rectangular designs within the rooms, a local *fresco* technique on wet plaster was employed. In this latter technique painters started work from the top downwards and they would apply as much plaster as they could paint in a single day. Fresco *buono* can be found also in a small temple in a village near Udaipur (Figure 119) painted by the ancestors of Lalit Sharma.

The technique of fresco *buono* is used today by Kripal Singh, an expert in traditional fresco *buono* (Figure 120). He clarifies that for the chemical reaction with lime only a few colours can be used in this process such as Indian red, red and yellow ochres and terre verte. Other colours like azurite can be only used after the plaster is dry. For white details he explains that scratches on the wall are employed in the same way in which it was made in the murals of the Mattanchery Palace in Kochi. He states that many are the implements employed in the making of a fresco *buono* (Figure 121), there are for example big trowels for smoothening the plaster and small trowels to beat on the wet plaster to make the colours brighter. Another implement, called rod, is used to cut the plaster because in fresco *buono* only the plaster that can be painted in a day is spread on the wall, the rest will be cut with this implement before it gets dry. He also elucidates that one of the ways to distinguish a fresco *buono* from a fresco *secco* is that of looking for such cuts in the wall. These kinds of cuts are clear in the murals of the Devnarayan temple in Sanvar (Figures 86 and 119). He also adds that another peculiarity of Indian fresco *buono* is that the wall results smoother than in fresco *secco*.

The texts prescribe that brushes can be made from the hairs collected from the ear of a calf, from the belly of a goat, from the tail of a muskrat or from tips of grasses. Kripal Singh confirms that all these statements are true, but again we should not consider the texts as prescriptive; they are rather suggesting possibilities. The use of a brush does not depend on following a text but on experience and availability. Kripal Singh for example says that, depending on the painting, the brushes may have been prepared with squirrel tail, goad, ear of a calf, and moustaches of rat or cat. In today's

practice, factory made brushes are used while hand made ones are kept just to show to the visitors (Figure 122).

As already pointed out, one of the peculiarities of the texts is that they do not separate the colours to be used for mural, panel or cloth painting. It appears clear that all the colours cannot be used in one single technique but the painters know exactly which is suitable for each technique. In practice these differentiations in the uses of colours are well known among painters. The following examples will elucidate this point.

In today's practice of traditional painting, an example of the use of natural colours is that of *phar* painting<sup>15</sup> (Figure 123). A *phar* painter from Bhilvara (Rajasthan), Gopal Joshi, maintains his family tradition of painting, which is seven hundred years old. He makes traditional *phar* paintings on cotton cloth representing the story of a local hero, Pabuji. In the process of painting he first of all prepares the cotton cloth with starch and then polishes it with agate (Figure 124), a stone widely used in the process of painting all over India. This has the function of making the cloth or the wall for painting smooth and shiny. After this process Gopal Joshi starts his painting with a yellow outline (Figure 125), a light colour easy to be corrected. After the outline is finished, he starts with filling in the colours he prepares. Natural colours are part and parcel of *phar* painting, and they give the designated effect. The colours employed here are yellow orpiment, green from copper corrosion (*zangar*), brown from a kind of red clay (iron oxide called *hirmaji*), vermilion from mercuric sulphide, blue from indigo, and lampblack. The colours are prepared for painting mixing them with gum and water and are kept for fifteen days. Traditionally, *phar* painting were made on very long cloth (c. 15 feet) and were used by storytellers or *bhopas* to entertain the people of villages chanting the story of Pabuji, Devnarayan or other local heroes. Today however, many factors are provoking radical changes in this kind of painting. The disappearance of *bhopas* is causing a commercialisation of the art. For example the painters do not make large *phar* paintings as their dimensions are rationalised to suit commercial purposes. Similarly, Gopal Joshi paints, using the same themes of *phar* painting, the borders of saris.

Traditional Orissan painting provides another instructive example of the use of natural colours. They are for example yellow orpiment, red ochre, indigo, lampblack, vermilion and white from a conch shell.<sup>16</sup> Other colours are derived by mixing these pigments. For example, green is derived from mixing indigo, white and yellow. Before their use, these colours are mixed with gum from the tree of the wood apple. Another characteristic of Orissan painting is the preparation of the ground in which the cotton cloth is applied with two or three layers of gum of tamarind seeds and chalk (Figure 126). After this coating becomes dry, the cloth is rubbed with a stone. In addition to this very traditional way of preparing ground and colours for painting, the painters of Raghurajpur, like Sudarsan Mohapatra, and of Bhubaneshtar, like Binod Maharana, also use artificial colours available in the market. This points once again to the inherent dynamics of Indian painting, which are not constrained by the contents of the *citrasutras* and whereby new colours and materials can be introduced according to the decisions of painters.

Another example of the room for change within the painting tradition is provided by the painters of Nathdvara. The largest segment of the work done by Nathdvara painters today consists of paintings representing Shri Nathji. The image usually depicts Shri Nathji adorned for the daily *darshans*. Today, this pictorial tradition shows a great experimentation of colours and materials for painting. In the past for example, the paper used for painting was traditionally from a village called Gosunda, near Chittor, and the painters used to produce their own colours from stones or plants (Figure 88). The influx of chemical colours is now ever present and factory-manufactured paper is purchased in local shops. The use of artificial colours and factory-made paper not only saves the painters a lot of time but also denotes a clear change of patronage. In the past, artists worked under the temple of Shri Nathji and painting developed according to the directions of the *gosvamis* who administered the temple. Today this activity is a business in which painters are free to experiment with new materials and colours in

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<sup>15</sup> *Phar* (also *phad* and *par*) is a traditional Rajasthani painting on cloth depicting the story of local heroes like Pabuji and Devnarayan. These narrative scrolls are considered sacred and treated as mobile shrines.

order to attract the attention of costumers in the numerous shops around the temple. For example they employ spray paint, cardboard and velvet for ornamentation instead of traditional colours and materials (Figure 127). The readiness to employ new materials and colours demonstrates that painters are constantly adapting themselves to changing times rather than obediently following an assumed textual authority.

These changes contrast with the traditional miniature painting of Lalit Sharma, a painter from Udaipur. Lalit Sharma learned the miniature painting from his family: his forefathers worked for the Maharanas of Udaipur. He is acquainted with the entire process of making colours and implements for painting. He can prepare squirrel tail brushes and the paper for painting. He keeps a videotape in which his father, Ghanshyam Sharma, shows the traditional process of miniature painting. The ground is prepared with three sheets of Gosunda paper glued one on top of the other with a paste made of wheat flour and water. Cloth is also prepared with wheat flour. He knows how to prepare colours (Figure 128), for example, he explains that lampblack may have different tones depending on the kind of oil used, such as mustard oil giving bluish black tinge and kerosene a brownish black effect. For the preparation of colours he mixes the already ground stones with water and Arabic gum. The quantity of gum Arabic depends on the painting. For a painting on cloth there is more gum than in a painting on paper. Animal glue (*sares*), made with camel fat, is only used when silver or gold leaf is used. The sketch of the painting is then made without following any text but by simply trying to organise the entire composition in a harmonious way.

To conclude, therefore, texts cannot be seen as prescriptive guides but rather they are an authoritative view on the form of traditional painting. The *citrasutras* emphasise not only that iconography and the theory of proportion are fundamental concepts in Indian painting, but also that the process of making a painting is critical. This view was emphatically expressed by some practising painters, like Lalit Sharma, who considers traditional Indian paintings to be only those made on cloth and with natural colours. On the other hand, other painters may find this view obsolete and try to experiment with new colours and materials. This freedom suggests that the schools of painting have

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<sup>16</sup> According to Kripal Singh shell white is used also in south India and Sri Lanka to whitewash walls for painting. He also explains that before the colour becomes ready for use it should be



different notions of tradition. As we have seen, painting is open to change, and in different places and times painters adapted their paintings to newly discovered pigments and artificially made colours. The changes in the painting process depend on numerous other factors, notably the degree of patronage. In Nathdvara, for example, the painting of the past shows the choices of the patrons which tended to keep the style and the use of colours more uniform and consistent, whereas today each painter tries to attract new buyers with the use of new techniques and materials. Another example of changes within a tradition is that of *phar* painting. *Phar* painters are trying to find a way to sell their art by decorating sari borders or by making small paintings. This fact stems from the fact that traditional *bhopas* or storytellers do not provide them enough work to survive. The distinction between tradition and innovation is made not only by comparing the past and present developments of a school but also on the basis of the information of the texts. This again is possible because texts are abstract from any given school of painting and therefore adaptable to our reading of any painting.

## Chapter 8

### The Theory of *Rasa*

This chapter analyses one of the aesthetic principles of Indian art, the *rasa* theory. In order to understand a painting or sculpture, one should consider the *rasa* theory together with the other principles discussed in the previous chapters rather than conceiving it as a separate entity. *Rasa* is generally labelled as *the* aesthetic principle of Indian art, although every chapter of this work explains an aesthetic principle, each of which should be understood and interwoven with the others in order to create or look at an Indian work of art.

*Rasa* is an essential feature of all Indian arts including drama, literature, painting and sculpture. The term *rasa* is well attested in early Indian literature in the allied senses of “essence” and “taste.” As Gerow explains (1977, p. 245-246) citations of the objective reference to *rasa* can be traced to the *Rg Veda* where it often designates the “essence” of the *soma* plant. The subjective reference to “taste” goes back at least to the *Shatapatha Brahmana*. The *rasa* was not at first propounded as a universal principle but was introduced as a characteristic of drama. Only in later times did *rasa* become an aesthetic principle of all arts. The first enunciation of the theory as a definable aesthetic principle is in the *Natya Shastra*, a text that concerns *natya*, the art of the stage. In the later development of the theory, most of the writers on *rasa*, such as Anandavardhana, shifted their focus to poetry.

Together with the texts on dance and on poetry, there are also some *citrasutras* that mention *rasa*; these are the *Vishnudharmottara* (43) and the *Samarangana Sutradhara* (82). From these two texts it appears difficult to enunciate a theory on the basis of their prescriptions without relating and comparing them with the other texts on the subject. In fact, we should infer that the *citrasutras* take for granted the existing theory that developed first in the *Natya Shastra* of Bharatamuni and other texts, from which they then developed their own conceptions.

Many are the works of secondary literature concerning the theory of *rasa* and its application in literature or theatre, whereas only a few examine the relationship

between *rasa* and painting or sculpture. One of the most important works on *rasa* and painting is the *Essence of Indian Art* by Goswamy (1986). The aim of Goswamy's work was to explore the theory in relation to painting and sculpture. The texts selected in his work are two classical sources - the *Natya Shastra* of Bharatamuni and the *Sahitya Darpana* of Vishvanatha - whereas texts on painting, which are appropriate for this study, are overlooked to consider more *authoritative* sources. Goswamy only briefly mentions the *Vishnudharmottara*, but he seems more involved on commenting on other works. The main aim of his book, however, is not so much to explore the theory of *rasa* through such texts, as to apply his understanding of the *rasa* theory to label Indian painting and sculpture according to one or other *rasa*. Such analysis involves arbitrary judgement, based on culture, time and space. The present discussion, however, focuses on examining the formulation of the *rasa* theory as expounded in its textual sources. It first considers the theory as explained by the *Natya Shastra* of Bharatamuni, a classical source on the subject. It then turns to analyse two *citrasutras* that mention *rasa*, namely the *Vishnudharmottara* and the *Samarangana Sutradhara*, highlighting key differences. Finally, our discussion examines a text on poetics, the *Dhvanyaloka* of Anandavardhana,<sup>1</sup> which marks an important development of the theory of *rasa* with the definition of *dhvani*, and highlights the difficulties of applying this doctrine to painting.

### ***Rasa theory of the Natya Shastra***

While the systematic analysis of *rasa* expounded in the *Natya Shastra* is not a ready-made guide, it is suggested that one should read and understand its characteristics in order to be able to regard and judge a drama or a painting on its own terms. The description presented here seeks to capture the basic notions of the theory of *rasa*. Some of them denote a purely symbolic meaning such as the associations of a *rasa* with

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<sup>1</sup> The *Dhvanyaloka* is a text ascribed to Anandavardhana, a Kashmiri author of the ninth century. This text, together with its commentary, the *Locana* of Abhinavagupta, is considered among the most influential Indian works on the theory and practice of literary criticism (Ingalls 1990, p. 1).

a colour or a deity, while others share an aesthetic and theoretical value like the explanation of the realisation of a *rasa* through its *bhavas* or emotional states.

According to the *Natya Shastra* (6) there are eight *rasas*. They are: *shrngara* or erotic, *hasya* or comic, *karuna* or tragic, *raudra* or wrathful, *vira* or heroic, *bhayanaka* or terrible, *bibhatsa* or disgusting, and *adbhuta* or marvellous. Each *rasa* is associated with a colour and a presiding deity. *Shrngara* is associated with *shyama* (dark colour) and with Vishnu; *hasya* is associated with *sita* (white) and Pramatha; *karuna* is associated with *kapota* (dove colour) and with Yama; *raudra rasa* is associated with *rakta* (red) and with Rudra; *vira rasa* is associated with *gaura* (wheatish brown) and with Mahendra; *bhayanaka rasa* is associated with *krshna* (black colour) and Kala; *bhibatsa rasa* is associated with *nila* (blue) and with Mahakala; and *adbhuta rasa* is associated with *pita* (yellow) and Brahma (6.15, 42-45 in *The Natya Shastra of Bharatamuni* 2000, pp. 71, 75)

The *rasas* as explained in the *Natya Shastra* are based on various emotional states called *bhavas* which are clearly explained in chapter 7 of the text. The *bhavas* can be of different types, like for example the *sthayi bhavas*, *vyabhicari bhavas* and *sattvika bhavas*. The *sthayi bhavas* or abiding emotions (7.8-27) are based on human emotions, they are eight in number, each of which is associated with a *rasa*. The temporary or transitory states of mind or *vyabhicari bhavas* (7.28-92) are listed as thirty-three in total, among them are discouragement, apprehension, jealousy, embarrassment and intoxication. To them are added eight involuntary physical reactions, known as *sattvika bhavas* (7.93-106), like perspiration, trembling and fainting. The use of *vyabhicari* and *sattvika bhavas* depends on the *rasa* to be portrayed, for example the *Natya Shastra* (7.108) explains that the *bhavas* to be employed in the representation of *hasya rasa* are weakness, suspicion, jealousy, weariness, fickle mindedness, dreaming, slumber and dissimulation.

The *Natya Shastra* also states that *rasa* originates in a combination of *vibhavas* (determinants), *anubhavas* (consequences, signs or indications) and *vyabhicari bhavas*. Determinants (*vibhavas*) refer to those factors that make the realisation of the emotion and the *rasa* possible. Determinants can be of two types: objective and stimulative. The objective determinants are the objects toward which the emotions are felt like the lover

for the *shrngara rasa*. The stimulative determinants of this *rasa* would be for example attractive clothing and jewellery, the moon and a secluded grove. The consequences (*anubhavas*) of the emotions in the representation of the *shrngara rasa* may be regarded as its symptoms, such as smiles and graceful movements (see also Ingalls 1990, pp. 16-17).

According to the *Natya Shastra*, the *shrngara rasa* or erotic mood originates from the *sthayi bhava* (abiding emotion) of *rati* (love). The text explains that whatever is clean, pure and beautiful is connected with this *rasa*. This *rasa* goes along with an elegant bright dress and make-up, and the presence of both male and female generate its outcome. A beautiful young woman is its *prakrti* or source of origin. The text divides *shrngara rasa* into two types: *sambhoga* (love in union) and *vipralambha* (love in separation). The *sambhoga* (Figure 129) is manifested through *vibhavas* (determinants) like the pleasant season, garlands, unguents, ornaments, dear and near ones, sensual objects, excellent mansions, objects of pleasure, going to the garden, listening to music and playing. Among its *anubhavas* (consequences) are clever and significant glances, movement of the eyebrows and movement of the limbs. Among the *vyabhicari bhavas* (transitory states) that apply to *shrngara rasa* are weakness, suspicion, envy, inebriation, exhaustion, anxiety, delusion, recollection, joy, excitement, stupefaction, arrogance, despair, impatient curiosity, sleep, loss of memory, dreaming, indignation, dissimulation, sickness, madness and death (*The Natya Shastra of Bharatamuni* 2000, pp. 75-77). The *vipralambha* or love in separation (Figure 130) is represented through *anubhavas* (consequences) like despondency, weakness, suspicion, envy, exhaustion, anxiety, impatient curiosity, sleep, dream, feigned anger, illness, madness, forgetfulness, sluggishness and death. The *Natya Shastra* makes a distinction between *karuna* (tragic) *rasa* and the *vipralambha* or love in separation. The former involves a desperate condition as a result of curse, affliction, downfall, separation from the near and dear ones, loss of wealth, imprisonment and slaughter, whereas *vipralambha* involves the condition of sticking to hopeful expectation of reunion out of yearning and anxiety (prose passage and verses 6.46-48 in *The Natya Shastra of Bharatamuni* 2000, pp. 76-77).

The *sthayi bhava* (abiding emotion) of *hasya* or comic *rasa* is *hasa* (laughter). Its outcome is through *vibhavas* (determinants) like improper dress, misplaced ornaments, boldness, covetousness, quarrelling, displaying deformed limbs, and pointing out the faults of others. Among its *anubhavas* (consequences) are biting the lips, throbbing of the nose and the cheek, opening the eyes wide, contracting the eyes, perspiration and holding the sides. The *vyabhicari bhavas* (transitory states) of this *rasa* are lethargy, dissimulation, drowsiness, sleeplessness, dreaming, waking up and envy. This *rasa* is most common to women characters and mean persons. It has six distinct varieties: *smita* or gentle smile, *hasita* or slight laughter, *vihasita* or open laughter, *upahasita* or laughter of ridicule, *apahasita* or obscene laughter and *atihāsita* or boisterous laughter. The superior types of persons, the middling ones and the mean ones each have respectively two of these (prose passage and verses 6.49-61 in *The Natya Shastra of Bharatamuni* 2000, pp. 77-79).

The *sthayi bhava* of *karuna* or tragic *rasa* is *shoka* (sorrow). Among its *vibhavas* (determinants) are curse, distress, downfall, calamity, separation, loss of wealth, murder, imprisonment, dangerous accidents and misfortune. Among its *anubhavas* (consequences) are discharge of tears, lamentation, parched throat and mouth, pallor of face, drooping of the limbs, gasping for breath and loss of memory. Among its *vyabhicari bhavas* (transitory states) are dejectedness, indifference, languor, anxiety, yearning, illusion, loss of sense, sadness, ailments, lethargy, sluggishness, loss of memory, fear, death, paralysis, tremor, pallor of the face and loss of speech (prose passage and verses 6.62-63 in *The Natya Shastra of Bharatamuni* 2000, pp. 79-80).

The *sthayi bhava* of *raudra* or wrathful *rasa* is *krodha* (anger). Its outcome is through *vibhavas* like anger, abuse, insult, telling lies, animosity and jealousy. The *vibhavas* connected with this *rasa* are beating, tearing, harassing, breaking, piercing, striking, hurling missiles and seizing of weapons. Among its *anubhavas* are making the eyes red, perspiring profusely, knitting of the eyebrows, clapping the hands, biting the lips, throbbing of the cheeks and hitting the palm with the fist. Among the *vyabhicari bhavas* of this *rasa* are tumultuous battle, energetic enthusiasm, impetuosity, wrath, restlessness, ferocity, profuse perspiration, trembling and rising of the hairs (prose passage and verses 6.64-66 in *The Natya Shastra of Bharatamuni* 2000, pp. 80-81).

*Vira rasa* is the exhibition of energy and enthusiasm with persons of high rank, and *utsaha* (strength) is its *sthayi bhava*. Among its *vibhavas* are composure and absence of infatuation, perseverance, good tactics, humility, valour, power, aggressiveness and mighty influence. Among its *anubhavas* are firmness, heroism, bravery, readiness to sacrifice and proficiency. Among its *vyabhicari bhavas* are fortitude, intellect, pride, impetuosity, ferocity, indignation, recollection and thrill of the hair (prose passage and verses 6.67-68 in *The Natya Shastra of Bharatamuni* 2000, p. 81).

The *sthayi bhava* of *bhayanaka* or terrible *rasa* is *bhaya* (fright). Its outcome is through *vibhavas* like terrific noise, empty house, entering a forest, death, murder of kinsmen and imprisonment. Among its *anubhavas* are trembling of hands and feet, movements of the eyes, bristling of the hairs of the body, pallor of the face and change of voice. Its *vyabhicari bhavas* are paralysis, perspiration, choked voice, thrill of the hair, trembling, change of the voice, lack of lustre, suspicion, fainting, dejection, agitation, restlessness, fright, loss of memory and death (prose passage and verses 6.69-72 in *The Natya Shastra of Bharatamuni* 2000, pp. 81-82).

The *bibhatsa* or disgusting *rasa* has *jugupsa* (disgust) as its *sthayi bhava*. Its outcome is from *vibhavas* like seeing what is unwholesome or displeasing, and hearing, seeing and discussing what is undesirable. Its *anubhavas* are squeezing up all the limbs, rolling about face and eyes, anxiety, spitting and expressing disgust. Its *vyabhicari bhavas* are loss of memory, agitation, loss of sense, illness and death (prose passage and verses 6.73-74 in *The Natya Shastra of Bharatamuni* 2000, pp. 82-83).

The *adbhuta* or marvellous *rasa* has, as its *sthayi bhava*, *vismaya* (astonishment). Its outcome is through *vibhavas* like seeing a divine being, attainment of a cherished desire, proceeding towards park and temples, seeing magical tricks and creations of things that can never be imagined. Among its *anubhavas* are gaping of the eyes, looking vigilantly, thrill of the hair, tears, perspiration, delight, uttering words of congratulation, making gifts and movements of hands and feet. Among its *vyabhicari bhavas* are shedding tears, paralysis, perspiration, choking of the voice, thrill of the hair, excitement and sluggishness (prose passage and verses 6.75-76 in *The Natya Shastra of Bharatamuni* 2000, p. 83).

### *Rasa theory in the citrasutras*

The *Vishnudharmottara* is the earliest text that seeks to elaborate the theory of *rasa* in the context of visual arts such as painting. The text does not explain notions like *vyabhicari bhavas* etc. but, taking them for granted, simply describes how each *rasa* should be represented in painting.

The *Vishnudharmottara* states that there are nine kinds of sentiments in painting (*citrarasa*). They are the erotic or *shrngara*, the comic or *hasya*, the tragic or *karuna*, the heroic or *vira*, the wrathful or *raudra*, the terrible or *bhayanaka*, the disgusting or *bibhatsa*, the marvellous or *adbhuta* and the tranquil or *shanta*.<sup>2</sup> The same list can be seen in many other later texts including the *Dhvanyaloka*, which will be discussed later. The *Vishnudharmottara* maintains that in the erotic sentiment (*shrngara*), the figures should be depicted clad in sophisticated dress and ornaments, and their amorous beauty should be expressed by the exquisite beauty of the lines. To bring about laughter in the representation of comic sentiment (*hasya*), one should portray the hunch-backed, dwarfs, things which look somewhat distorted, and gestures such as the unnecessary clenching of the fists.<sup>3</sup> In the case of the tragic sentiment (*karuna*), one should paint situations that evoke sympathy such as begging, separation from the beloved,<sup>4</sup> renunciation, ailment and calamity. To express the wrathful sentiment (*raudra*) in a painting, one should depict harshness, agitation, anger, hostility, and the destruction of

<sup>2</sup> *Shanta rasa*, added to the traditional list of eight *rasas* of the *Natya Shastra*, has a controversial position. Some authors do not accept it because they wonder in what sense "inaction" can be "dramatic." According to Gerow (1977, pp. 246-247) *shanta rasa* is needed precisely because the *rasa* theory in time encloses other literary forms. Anandavardhana in the *Dhvanyaloka* (IV.5) clearly explains that the *Mahabharata* has the *shanta rasa* as its main *rasa*. The fundamental object of the poetical enunciation in the *Mahabharata* is that of *moksha* or liberation from worldly existence.

<sup>3</sup> This verse is explained by Dave Mukherji (2001, p. 256) as a condensed phrase taken from a common stock of what was considered to be a comic situation in ancient India. She elucidates the verse with the help of Mammata's *Kavyaprakasha* (IV.37) in which the author describes the *hasya rasa* narrating the story of a *brahman* who after ablutions is hit by the unclean fists of a prostitute.

<sup>4</sup> Note that the *Natya Shastra* makes a clear distinction between love in separation or *vipralambha* and the *karuna rasa*. Goswamy (1986) seems to accept the reading of the *Vishnudharmottara*, disposing figure 130, representing *vipralambha*, in the section on *karuna rasa* of his book.



property and food. It should be furnished with glinting weapons and armour. In a painting expressing the heroic sentiment (*vira*), there should be a display of nobleness in form of oath taking and pride; the hero should be depicted with a frown and an arrogant expression. In a painting expressing the terrible sentiment (*bhayanaka*), the subject of portrayal should be vile, frightful to look at, fading away in decay and looking contemptible and murderous. The painting that represents the sentiment of disgust (*bibhatsa*) disturbs the mind because of its terrifying subject matter such as the funeral grounds and the acts of reprehensible violence. The marvellous sentiment (*adbhuta*) is conveyed by depicting someone having a wide-eyed look, an expectant face and beads of perspiration. The representation of the tranquil sentiment (*shanta*) consists mainly of ascetics in meditative postures with a band clasping their legs and of any other subject that expresses calmness (ViDha 43.1-10 in Dave Mukherji 2001, pp. 240-243).

The *puranic* tradition, recognised in the compilation of a text like the *Vishnudharmottara*, continues in the works of Raja Bhoja. This king holds an equivocal position among the writers on *rasa* because he seems uncommitted to any traditionally defined view on the theory, and because he ignores the revolutionary notion of his days, the *dhvani* theory of Anandavardhana. These may be the reasons for the neglected position of his writings in the study of *rasa* theory. His views, however, seem very interesting and throw much light on concepts like *rasadrshitis* in pictorial representations. His views are also innovative with the addition of new *rasas* like *prema*. In the 82<sup>nd</sup> chapter of the *Samarangana Sutradhara*, entitled *rasadrshiti-lakshanam*, the author describes eleven *rasas* and eighteen *rasadrshitis* relevant in the manifestation of sentiments in pictorial images. To the traditional list of nine *rasas* of the *Vishnudharmottara* is added for example *prema rasa* or *rasa* of love.<sup>5</sup>

In the *Samarangana Sutradhara* (82) the *rasas* are explained in their physical and mental manifestations. *Shrngara* is manifested with the movement of the eyebrows and lovable look, and the mind is full of the emotion of love. *Hasya rasa* has a playful

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<sup>5</sup> *Prema* (love, affection) *rasa* of the *Samarangana Sutradhara* seems to be an original contribution of King Bhoja. The eleventh *rasa* of his theory appears illegible from the *Samarangana Sutradhara* text edited by Ganapati Sastri (1925).

mood, the lips are flashing and the eyes are blossoming. *Karuna rasa* is represented by cheeks wet with tears, eyes closed and by a mood of worry and agitation. *Raudra rasa* is expressed by red eyes, the forehead swelled up and the lower lip being bitten by the teeth. *Prema rasa* has a happy mood (*harsha*)<sup>6</sup> as a result of gain of reaches, progeny and seeing the near and dear ones. *Bhayanaka rasa* is characterised by agitated mind and heart manifested by perplexed and confused eyes, cowed down through fear of the look of the approaching evil. *Vira* is represented by a mood of endurance and strength. *Adbhuta* is manifested by the pupils of the eyes being both paralysed and gratified on account of an extraordinary spectacle or scene. *Shanta rasa* is characterised by the absence of change and attachment and by a happy look (SamSut 82.1-13 in Sastri 1925; see also Shukla 1957, pp. 74-76).

The table below summarises the list of *rasas* for each text mentioned in this chapter, highlighting some of their differences.

**Table XIX**  
**Rasas**

<i>Natya Shastra</i>	<i>Vishnudharmottara</i>	<i>Samarangana Sutradhara</i>	<i>Dhvanyaloka</i>
<i>shrngara</i>	<i>shrngara</i>	<i>shrngara</i>	<i>shrngara</i>
<i>hasya</i>	<i>hasya</i>	<i>hasya</i>	<i>hasya</i>
<i>karuna</i>	<i>karuna</i>	<i>karuna</i>	<i>karuna</i>
<i>raudra</i>	<i>raudra</i>	<i>raudra</i>	<i>raudra</i>
<i>vira</i>	<i>vira</i>	<i>vira</i>	<i>vira</i>
<i>bhayanaka</i>	<i>bhayanaka</i>	<i>bhayanaka</i>	<i>bhayanaka</i>
<i>bibhatsa</i>	<i>bibhatsa</i>	<i>bibhatsa</i>	<i>bibhatsa</i>
<i>adbhuta</i>	<i>adbhuta</i>	<i>adbhuta</i>	<i>adbhuta</i>
-	<i>shanta</i>	<i>shanta</i>	<i>shanta</i>
-	-	<i>prema</i>	-
-	-	(?)	-

The *Samarangana Sutradhara* explains also the types of glances to be used in the depiction of a *rasa*.<sup>7</sup> Among the eighteen *rasadrshitis* are *lalita* (amorous) related to

<sup>6</sup> Note that *harsha* or delight in the *Natya Shastra* (7.61-62) is a *vyabhicari bhava*, whereas in the *Samarangana Sutradhara* it becomes the *sthaiyi bhava* of *prema rasa*.

<sup>7</sup> Glances are also explained in a more detailed list in the *Natya Shastra* (8.38-94) which mentions thirty-six glances with their characteristics. They are divided into three kinds: *rasa*

*shrngara rasa*, *vibhrama* (moving to and fro), *hrshta* (pleased) related to *prema rasa*, *vikasita* (expanded) related to *hasya*, *vikrta* (deformed), *kuncita* (contracted), *vihvala* (unsteady), *yogini* (joined or contemplative), *madhyastha* (indifferent), *dina* (afflicted), *drshita* (experienced), *jihma* (squinted), *bhrukuti* (contracting the brows), *urdhvagata* (raised upwards), *sankucita* (contracted, closed), *sthira* (firm, fixed) (SamSut 82.14-34 in Sastri 1925). From the text, however, it is not possible to associate each of these glances with its corresponding *rasa*. It is only by knowing the nature of a *rasa* that we can do it, as it is suggested by Shukla (1956, p. 76), who, for example, associates *bhayanaka rasa* with *vikrta*, *vihvala* and *kuncita* glances.

Both the *Vishnudharmottara* and the *Samarangana Sutradhara* seem to recognise the role of the *Natya Shastra* from which they derive and modify their own theories. The *Vishnudharmottara* uses in its descriptions of the depiction of *rasas* the appropriate subject matters with their related *vibhavas* and *anubhavas*. Among the differences with the *Natya Shastra* is the introduction of the *shanta rasa*. Another main difference is that of considering the “separation from the beloved” as a state that produces *karuna rasa*, whereas the *Natya Shastra* clearly states that the *vipralambha* involves the condition of sticking to hopeful expectation of reunion with the beloved out of yearning and anxiety, and is therefore a case of *shrngara rasa*. The *Samarangana Sutradhara* explains the *rasas* through their mental conditions and their related physical reactions, rather than using themes, as in the *Vishnudharmottara*. It accepts the main eight *rasas* of Bharata, but King Bhoja distinguishes himself by his additions. He not only adds the *shanta rasa* but also two new *rasas*: the *prema rasa* and another that is unfortunately illegible from the manuscripts of the text. Moreover, this text gives great importance to the *rasadrshitis*, like the *Natya Shastra*, but also in this case King Bhoja distinguishes himself with a different list of glances. The *Natya Shastra* has a very systematic list of glances and each *rasa* has its homonymous *rasadrshiti*, it also makes a meticulous distinction between three kinds of glances (see note 7). On the other hand, the *Samarangana Sutradhara* lists completely different names. Some of the *rasas* have their corresponding *rasadrshitis* but, in the majority of

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*drshitis* or glances expressing a *rasa*, *sthayi bhava drshitis* or glances related to the *sthayi bhava* (abiding emotion), and *sancari bhava drshitis* or glances regarding transitory states.

the cases, there is not the kind of correspondence between *rasas* and *rasadrshitis* as found in the *Natya Shastra*.

### *Citra and dhvani*

The other text to be considered in this study is the *Dhvanyaloka*, which marks an important stage in the development of the *rasa* theory with the formulation of the *dhvani* doctrine. This text is a study in which poetry is analysed according to the types of meaning it conveys to the attentive reader. In the traditional Indian theory of meaning it was generally agreed that words had two sorts of semantic power: the power of direct denotation (*abhidha*) and a secondary power of indirect indication through figures of speech (*lakshana*). In addition to these two powers, according to the *Dhvanyaloka*, written by Anandavardhana (9<sup>th</sup> century), there is a third verbal function. Anandavardhana considered this to be the most valuable of all semantic powers for poetic expression, a power which in its most general aspect he calls *vyanjakatva*, the power of suggestion, or more literally, the power of revelation. He calls this power *dhvani* when it is in its purest form, that is, when it predominates over the other semantic powers in the sentence. Anandavardhana, in the *Dhvanyaloka* builds up a typology of suggestion by the use of examples, taking passages from famous Sanskrit poets to explain the theory. One of the typologies of suggestion enumerated by this writer is, in his words, “where the denoted sense is unintended” (*avivakshitavacya*). This typology (*Dhvanyaloka* II.1) is divided into two varieties: the variety in which the denoted sense is “entirely set aside,”<sup>8</sup> and the typology where the denoted sense is not

<sup>8</sup> One of the examples used by Anandavardhana (III.1b and commentary in Ingalls 1990, p. 376) to explain this typology is a stanza taken from the *Bhagavadgita* (2.69):

In what is night to all creatures  
the true ascetic wakes;  
where others wake, the sage who sees  
sees that it is night.

The primary sense of this sentence is obstructed, suggesting that the ascetic, because of his extraordinary nature, is attentive to the perception of truth and averse to false perception. Anandavardhan clarifies that in this sentence the meanings “night” and “waking” are not intended. What is communicated is rather the attention of the saint to a knowledge of truth and his aversion to what is not truth. This is therefore an example of the subtype of sentences where the denoted sense is “entirely set aside.”

wholly abandoned but it is “shifted to something else.”<sup>9</sup> This typology however does not yet reveal the ultimate sense of literature, that is *rasa*, which we find in the second typology. The second (*Dhvanyaloka* II.2) is the typology “where the literal sense is intended but only as leading on to something further” (*vivakshitanyaparavacya*). This typology is also divided into two varieties, depending on whether or not we are conscious of the succession from our understanding of the literal meaning to the “something further.” The variety in which we are conscious of the interval between the explicit and the implicit meanings will be a case of “*dhvani* similar to echo” (*anurananarupa*).<sup>10</sup> The case in which we are not conscious of any interval between the two senses is the one where the “something other” is a *rasa* (*rasa-dhvani*),<sup>11</sup> which is,

<sup>9</sup> Anandavardhana (III.1c and commentary in Ingalls 1990, p. 378) explains this typology using the following verses:

The passing of time is poison to some,  
nectar to others;  
part poison part nectar to some  
neither poison nor nectar to others.

The author clarifies that we are able to make sense of these verses only if we shift the literal sense of the words “poison” and “nectar” to the sense of “pain” and “pleasure.” This is a case in which the denoted sense is “shifted to something else.”

<sup>10</sup> One of the examples given by Anandavardhana to explain this typology is (II.31b and commentary in Ingalls 1990, p. 362):

O farmer’s bride,  
gather the flowers on the ground  
and don’t shake the *sephalika* tree.  
Your bangles will end on an ugly note  
if your husband’s father hears them.

In this case, explains the author, we have a wife, who is engaged in sex with her paramour, being warned by a friend because of the noise, heard afar, of her jingling bangles. This context is necessary in order to understand the direct meaning. But after the expressed meaning has been understood, inasmuch as it has been expressed only in order to furnish the final meaning which is the hiding of the woman’s adultery, it becomes subordinate to the suggestion.

<sup>11</sup> Among the verses quoted by Anandavardhana to exemplify this typology is (IV.2a and commentary in Ingalls 1990, pp. 682-684):

The bride has lowered her lips to her beloved’s face,  
but afraid of waking him, for he pretends to sleep,  
she checks the relish of her kiss and hesitates  
with watchful turning; he too continues motionless,  
fearing that in shame she may wholly turn aside.  
In such a moment these two hearts, caught in the state  
of their anticipation, have reached the peak of love.

This stanza clearly depicts the *shrngara rasa*. The feelings of the two lovers are not directly expressed, their bliss does not require any plunge through physical experience, but it is described in a subtle way. The arising of this *rasa* is due to the obstacles, such as

in the critique of Anandavardhana, the ultimate aim of literature (Ingalls 1990, pp. 13-15 and Mazzarino 1983).

The *Dhvanyaloka* (III.45) clearly states that *dhvani* should be used in the composition of good poetry. However, many scholars claim that *dhvani* works in painting too. Among them is Goswamy (1986) who includes a discussion of *dhvani* in his book without actually explaining how it should work in painting. Raghavan (1933, pp. 903-904) is one of the first writers on Indian painting to assume that the theory of *dhvani* (suggestion) is applicable to *citra*. However, the way in which he tries to apply it appears incorrect according to our understanding of the theory. Raghavan tries to apply the theory of *dhvani* to painting taking as his starting point a passage of the *Vishnudharmottara* (42) (see Appendix III). He states that:

...in an artistic representation, it is the suggestion that forms the very life of that artistic expression. This can be also proved by taking the Canons given by the *Vishnudharmottara* for depicting things like evening etc. A perusal of the verses in chapter 24 (*sic*), which show, how mountains, sky, earth etc. must be depicted, will prove the truth of this statement. The subjects, e.g., gamblers should be suggested by depicting them as bereft of their upper cloth...The night must be suggested by drawing a thief walking stealthily, by an abhisarika hurrying to meet her lover in her trysting place and so forth.

According to our understanding, this passage is describing locations and backgrounds for painting and is not a way to suggest a *rasa* through *dhvani*. Raghavan relates to the theory of *dhvani* the way in which locations and backgrounds should be represented in painting. In fact, the *Vishnudharmottara* passage mentions locations or periods of time to be shown using some of their particular attributes or objects associated with them (*abhisarika* and the night), which means that the text is suggesting a metaphorical way of depiction (*lakshana*) rather than a literal (*abhidha*) representation. However, the feeling produced by a location in an Indian painting

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embarrassment and shame, that love finds in its manifestation. Abhinavagupta in the commentary to this stanza explains that the bride is forcibly checked by her desire to kiss her beloved because this could wake him up. She is therefore examining again and again whether he is asleep. While her dear one for his part makes no motion to kiss her, fearing that if he were to kiss her as she now is, she would be covered with shame and would turn away. The stanza shows clearly that their hearts are in a state of anticipation or yearning, that is, agitated by love-longing rather than satisfied by the accomplishment of their desire. In this stanza the passion, without there appearing any possibility that the mutual restraint of their burgeoning desires should cease, bespeaks the union in a single state of mind of the lovers, and so the love is strengthened to a greater degree.

cannot be considered a predominant feature but subsidiary to the main theme. Locations and backgrounds are only one of the constituents of a painting and these alone could not produce a *rasa*, especially considering the narrative aspect of Indian painting. Using the terms of the *Natya Shastra* a location would be one of the constituents or a stimulative determinant of a painting, and only when integrated with other constituents can it produce a *rasa*. From this we can conclude that what Raghavan explains cannot by any means be considered a case of *dhvani* (suggestion) leading to a *rasa* (*rasa-dhvani*).

It is very difficult to look at an Indian painting through *dhvani*. The theory of *dhvani* and *rasa-dhvani*, as it is formulated in the *Dhvanyaloka*, is applicable to poetry, from which many verses are taken and discussed. The writer explains (III.2-4, 16) that behind the doctrine of *dhvani* there are sounds, words, and grammatical components like stem, number, suffix and compounds. This assertion tells us that this theory is worked out for poetry and other arts depending upon verbal operations. Moreover, none of the texts on painting analysed mentions *dhvani* as a principle applicable to painting. However, as in the case of other theories (physiognomy, dance, sculpture) analysed in this work, we surmise that, on the theoretical level, we can work out the meaning of this theory so that *dhvani* may also be applicable to painting. Since it is a theory that explains the way in which we should perceive the meaning of a work of art, we can infer that some of its aspects may be relevant to painting by implication. Using the theory we can assert that a painting, like poetry, may produce a *rasa* through suggestions (*dhvani*) in the case in which we are not conscious of the interval between the perception of its literal meaning and the "something further." For example, looking at figures 129 and 130, one should immediately perceive the feelings of happiness for the union with the beloved in the first case, and that of dejection in the other. Other typologies of *dhvani* can also be analysed in the same way. In fact, the four typologies mentioned previously have many subdivisions and, as Anandavardhana states, there are numerous types of *dhvani* (III.43). However, even if Anandavardhana gives many examples to specify this kind of reading in poetry, it remains very difficult for us to give examples of *dhvani* in painting, due to the complicated nature of the different verbal functions in Indian poetry. For an understanding of all the implications of *dhvani*

in painting, we should look at its theory as a whole, which means that we should consider its later developments as well, as for example the commentary of the *Dhvanyaloka* by Abhinavagupta. This kind of study, which would include an analysis of the theory of Indian traditional poetry and literature, goes beyond the purpose of this work and is left here open for future research.

### Conclusions

This chapter analysed some fundamental aspects of the *rasa* theory. As stressed in previous chapters with respect to the other theories of painting, the *rasa* theory cannot be treated as a set of fixed rules and its contents need to be appreciated from a more holistic view in order to fully interpret a painting on its terms. *Rasa*, with all its related notions, is a complicated concept, but an understanding of its meaning in different contexts is fundamental to capturing the spirit of traditional Indian art. As Goswamy states (1986, pp. 30), it would be vain to apply the *rasa* theory as it is described in the texts in all its complex details to each work of art. Nor would it be possible to identify, to the letter of the theory, those elements constituting the determinants, consequences and complementary emotional states of any particular *rasa* of a sculpture or painting. This is to say that the theory expounded is not ready-made for application and that we should understand it as a flexible interpreted notion in order to have a working knowledge of its rules. This would account for the disparity of descriptions of *rasa* in the texts and for the differences between the descriptions of *rasa* in the *Vishnudharmottara* and the *Samarangana Sutradhara* and what we see in extant painting.

This study also shows that the texts analysed present numerous incongruities but that at the same time there is also a certain element of consistency. Each text accepts a set of fundamental views on the theory and yet at the same time reformulates or adds some new concepts. This is evident from a comparison of the detailed theory expounded in the *Natya Shastra*, and its classification and technical notions, with the theory illustrated in the *citrasutras*, which, while accepting and incorporating the rules of the *Natya Shastra*, seeks to reformulate and adapt the theory to suit painting. While



the basic list of *rasas* of the *Natya Shastra* is widely accepted, the other texts add some contributions, like *shanta* and *prema rasas*. These additions denote a continuous speculation on the meaning of *rasa*, whose theory is extended to include new sentiments. This is the case of *shanta rasa*, included in later texts, which was needed to describe the feelings of new literary forms like the *Mahabharata*. *Prema rasa*, added by Raja Bhoja, is less discussed than *shanta*, because of the controversial position of this king, whose views are considered subsidiary, not only in the secondary literature but also in later speculations on *rasa*. However, the addition of *prema rasa* appears very important because it includes in the list of *rasas* that of the love for progeny. This *rasa* may be seen as an important achievement as it may include for example the relationship between the devotee and a god like Krishna as a child, a relationship that stands at the basis of *bhakti* and can be expressed with this *rasa*. From the comparison of *rasas* it emerges that the definition of their determinants may also vary from text to text. This is the case of *karuna* or tragic *rasa* which includes in the *Vishnudharmottara* the separation from the beloved as one of its determinants, whereas the *Natya Shastra* includes this situation in one of the two types of *shrngara rasa*, the *vipralambha* or love in separation (Figure 130).

Ohri (2001, pp. 109-110) suggests that other sources can provide useful insights into understanding the meaning and applications of *rasa* in a painting. He states that Sanskrit texts and verses in Hindi selected from the famous works of poets in north India are very often seen in Pahari painting. These are invariably inscribed on the back or on the margins of the painting, and were, most probably, written by *pandits* after the completion of the work. Thus, the collaboration of the *pandit* with the artist in the production of a series of paintings was a critical factor with regard to the content and the *rasa* of the episode to be depicted. Ohri (2001) also explains that sometimes the *pandit* had to render the Sanskrit text into a local language so that the viewers could understand the subject easily. The translation must also have been helpful to the artist for understanding the rendering of the *rasa* in its visual form. This informative passage by Ohri stands in direct contrast to the theory of *dhvani* in which the arising of a *rasa* is unconscious and immediate. This also suggests that the understanding of the story and of the *rasa* was something that only an intellectual audience could grasp. A wider

audience may have precipitated the need to write the verses to explain a painting. This can also be said today. Only intellectuals, like Kripal Singh (Jaipur), know about *rasa*, but most present day practitioners do not know about its importance or even existence.

The final part of this chapter highlighted the complications of reading a painting in terms of *dhvani*. Even if it was suggested that the *dhvani* principle may be applicable to our study, further study of its wider application is still needed to fully understand its precise implications for painting. Indeed, its application to poetry itself is controversial, and many writers contemporary to or of the period after Anandavardhana did not accept this doctrine (see for example Gerow 1977, p. 258).

The *rasa* theory is theoretically not different from the other constituents of painting analysed in previous chapters. As in other concepts, its exposition involves a technical discourse that provides scope to introduce the reader, viewer or practitioner into a profound understanding of the meaning of a painting through its signs and thereby, to grasp the sentiments expressed in it. *Rasa*, therefore, should not be considered as a separate entity from other technical constituents like measurement and proportion, stances and colours. A good painting should be performed with a working knowledge of all of these factors. Without knowing the theory of *rasa* our understanding of painting would remain fragmentary and superficial.

## Conclusions

This study has critically reassessed our understanding of the main concepts of the theory of painting, offering a new perspective that moves beyond prevailing assumptions about the *citrasutras* in established research. In particular, we have criticized the dominant approach of conceptualising these texts as prescriptive guides. This view is widespread in the secondary literature, emerging first in the early translations of the texts such as the *Vishnudharmottara* by Kramrisch (1924) and the *Citralakshana* of Nagnajit by Laufer (1913) and has been pursued in later studies, such as those of A.K. Bhattacharya (1974 and 1976). Research to date draws upon Western notions of these texts as prescriptive guides commanding ultimate authority on, and representing 'the essence' of, Indian painting. This study argued, however, that not only do the texts themselves contain lacunae and inconsistencies in articulating basic concepts, which belie claims of their status as prescriptive guidebooks, but that also the normative practice of painting should be accorded equal status and analysis in seeking to understand Indian theories.

It was also suggested that it is only by drawing together the various concepts expounded in the diverse range of texts that we can understand the theory and the practice of painting. Texts must be seen as representing views on how one *should* create a painting, but not necessarily as principles that must be strictly followed to the letter. Indeed, the reading of a text itself is subjective and open to different interpretations, a factor widely ignored in secondary literature, which misleadingly assumes that texts can be treated as sources of 'objective truth' on Indian art. As we have seen, texts are abstracted from time and space, a feature that makes their concepts applicable to any kind of school of Indian art.

Another point developed in this study is that the word *citra*, commonly translated as "painting" may have a different connotation. In particular, the way in which the theory is expounded in the various texts is abstract and this suggests that the meaning of *citra* may acquire the abstract connotation of "mental image" rather than

that of “painting.” The male prototype used in the exposition of the theory should not be seen as an image to be translated into a pictorial representation but as an image that should work in the mind of the painter as a mental device. In fact, the findings of this study also suggest that the *citrasutras* should be seen as a specialized literature open to a variety of uses and interpretations. One such use is that of a mnemonic device for artists. The theory, written into verses, ‘functions’ in the mind of the painter or sculptor. In this way, considering the adaptability of the prescriptions, a practitioner may flexibly apply the text as a device, modifying the concepts according to the specific work to be done. This point was clearly expounded in chapter 3: a sculptor like Ram Prasad Sharma (Jaipur) knows exactly in his mind how a perfect body should measure and applies this knowledge, gained from experience and through the family, in a different way every time he seeks to create a new sculpture, modifying and adapting this knowledge according to the nature of the work to be done. The sculptor expounded his view and ideals comparing his image of Lakshmi (figure 26) with a Western representation of a woman (figure 27). In particular, he manifested his appreciation for Lakshmi as representing the embodiment of the right proportions and beauty, and criticised the portrait by Bellini as “unnatural” because of the big belly and arms.

The abstract nature of the texts is one of the main points raised in the empirical findings of this study. This characteristic permits one to read, interpret and use the texts in different ways. It was emphasised that temporality and spatiality as well as many other factors like patronage influenced the development of Indian schools of painting and produced changes in the use of colours and materials. This study has shown that theory cannot be associated with any particular time period or designated area. A text like the *Devata-murti-prakarana* is often used to explain Rajasthani architecture (see for example Hooja, 2001). The detailed chapter on Jaina iconography (7) was probably written during a period of great flourishing of Jaina temples, such as that at Ranakpur, but we can use its prescriptions to understand Jaina sculpture and temples founded before the writing of the texts or built in different places, such as Gomateshvara at Shravanabelagola (Karnataka) (Figure 131). The abstract nature of the texts also permits a multi-dimensional reading of the texts, whereby the different mental images it creates become translated into varying practices, as seen from a comparison between

different rendering of concepts, such as the *hamsa* type of man (figures 8 and 9), the eye like a fish (figure 18) or the eye like a *padma* (figure 20).

Another major point developed in this study is that a more holistic approach needs to be adopted in understanding the theory of Indian painting. An analysis of the texts should not consider the traditional Indian sciences (painting, sculpture, architecture, dance, physiognomy, etc.) as separate entities. While the theory of dance and that of physiognomy are often included in studies on the *citrasutras*, other fundamental concepts, like those of sculpture, are completely excluded. Physiognomy was included in the analysis of the *Citralakshana* of Nagnajit by Laufer (1913) and later in the studies on the *Vishnudharmottara*, like Dave (1991) and Dave Mukherji (2001). Our study also included an analysis of the role of physiognomy and tried to emphasise the relationship between physiognomy and the theory of painting highlighting similarities and intertextual relationships between the *Citralakshana* of Nagnajit, the *Vishnudharmottara* and the *Brhat Samhita*. It was also underlined that while some of the concepts of physiognomy are relevant only on the theoretical level, like the characteristic of the voice or the 40 teeth for the *cakravartin*, some other aspects can be recognised in the practice of painting as for example the conch-like neck (Figures 23, 24 and 25) and the skin with invisible hairs and veins. Dance is included in studies of the theory of painting and sculpture but in this case, too, scholars are confused on its role because the detailed theory expounded in the *Natya Shastra* seems to bear little relevance on painting. In this study it was emphasised that theory should not be confused with practice and even if not all the *mudras* of the *Natya Shastra* are recognisable in the practice of painting or sculpture, its theory can be 'worked' in the mind.

In some cases established research draws conceptual boundaries between disciplines, with the effect that notions like *talamana*, *lambamana*, *mudras*, *pada mudras* and *asanas* are not considered to be part of the theory of painting. These concepts are generally analysed in studies on the theory of sculpture like Rao (1914), Banerjea (1941) and Sthapati (2002), and have been ignored in the major studies on the *citrasutras* like those of Shukla (1957), Bhattacharya (1976) and Chakrabarti (1980). As this study has shown, however, all of these concepts hold relevance for Indian

painting, not only on the level of the theory but also in practice. This was demonstrated, for example, by the fact that the painters of Nathdvara use *talamana*, *lambamana* and *pada mudras* to create the images of Shri Nathji (Figures 48 and 49). The painters of Nathdvara confirmed that the image of Shri Nathji is  $5 \frac{1}{2}$  *talas*, has the feet in *samapada*, and that not only is the *brahmasutra* fundamental but that horizontal lines are also employed in the realisation of his raised arm, whose elbow should be at the same level of the earring at the top of his ear.

The methodology adopted in this study permitted to compare different textual sources to understand the development of the theory and to highlight the living nature of the texts. The way in which the theory is expounded has common features such as the use of a male prototype. From an analysis of the texts it emerges that in spite of this consistent approach, each text does not analyse the same concepts. For example the *Vishnudharmottara* does not contain *talamana* and the *Devata-murti-prakarana* does not contain information on colours and plaster. This means that each text develops different ideas and cannot, therefore, be seen as guides. It has also been demonstrated that certain other aspects of the theory developed over time. The theory of proportion of the early texts was permeated by the use of another section of Indian knowledge, namely physiognomy. Physiognomy was very important in texts like the *Citralakshana* of Nagnajit and the *Vishnudharmottara*, which explain the theory in applying five stereotypes of men, (*hamsa*, *bhadra*, etc.). Later texts were more technical and the five stereotypes were substituted by the *talamana* system, which permits the creation of images of different heights and proportions.

This study has also highlighted some of the discrepancies between texts. Discrepancies can be seen in the exposition of proportion and *talamana* theories (chapters 3 and 4) in which texts give different measurements for the realisation of figures (tables VIII-XI), in the attributes for the depiction of gods (chapter 6, tables XIII-XVII) or in the list of *rasas* (chapter 8, table XIX). Sachdev and Tillotson (2002, pp. 175-176) clarify that:

Indeed the discrepancies can be explained historically: they arose because various texts were composed in different places and times, by authors with differing expertise and audiences, with more or less knowledge of preceding texts, or with a view to different local conditions.

This explanation emphasises once again that texts are about ideas rather than fixed rules. These ideas are clearly permeated by the same worldview, which confers to the texts the same outlook.

This study not only emphasised the discrepancies between texts but also clarified that in some instances it is difficult to fully understand the texts since some of the concepts are mentioned without any description of iconographic features. This can be seen in the case of classifying painting (chapter 2). Texts explain the classification of painting with vague aesthetic characteristics so that it becomes very difficult to recognise those characteristics in actual paintings and employ the different classifications as a standard of critique. Another clear example is that of the *Vastusutra Upanishad*, which articulates features of *mudras* and *asanas* without any kind of explanation or reference to their iconographical representations. Some scholars, however, remain determined to find clear answers even if their speculations fail to reach informative conclusions. This is the case of Sivaramamurti (1978) who seeks to explain the classification of the *Vishnudharmottara* by a simple juxtaposition of images to the various types of painting (Figures 3, 4 and 5). As in many cases the anxious expectations of scholars to find 'the truth' yielded no results, it was promptly concluded that the texts contain secrets. Among the scholars who adopt this position is Moti Chandra (1949a, p. 67) who claims that: "It is due to the secretative [sic] nature of the informants that the medieval Sanskrit texts on painting are unable to explain all technical points." It was argued, however, that the culture-specific origin and development of certain concepts do not permit easy understanding, rather than any motivation to preserve secrets. Indeed, in some cases speculation is of little help and can create considerable confusion.

Most critically, however, this study suggests that research on the texts of Indian painting needs to reformulate its understanding of the relationship between theory and practice. While it is difficult to draw direct parallels between texts and extant painting, painters must be considered a living link between theory and practice. In spite of immense changes in 'traditional' styles of Indian painting in recent times, living painters and sculptors are of immense help in seeking to understand the way in which

theory is related to practice. As argued in this study, texts do not play the role of prescriptive manuals, rather we should understand the theory as a way of conceiving Indian art, a way of reasoning. Only after appreciating this understanding can we seek to identify what practice and theory hold in common. This point was demonstrated in the empirical chapters on measurement, proportions and colours. Both practitioners and texts stress the importance of measurement, one of the fundamental paradigms of Indian art (but often forgotten in art criticism). Texts describe the perfect measurement of a man, but do not state that each figure should be drawn according to that paradigm, rather they seek to describe an ideal form of measurement for the mind to reflect upon and modify according to the task at hand. As Ram Prasad Sharma explains (chapter 3) a huge belly is not an ideal feature for depicting a human body and it is not suitable for the depiction of women, but in the case of the image of Ganesh it is necessary. Also in *talamana* such a relationship between theory and practice can be deduced. The texts describe the system although is not used in practice in the way in which texts suggest. Schools of painting and sculpture use the range of *tala* suitable for developing their respective styles. This is the case of the image of Shri Nathji of 5 ½ *talas*, a measurement that it is not even mentioned by the texts, but known and employed by the painters of Nathdvara. The colours are also described in the way in which they should be prepared. This is, however, one of the instances in which spatiality and temporality of text and practice play a fundamental role. Texts like the *Vishnudharmottara* and the *Shilparatna* describe a range of natural colours to be used in painting. In this field it appears that there have been huge changes with the advent of the Mughal Empire, which greatly influenced many of the Indian schools of painting in the use of new colours. The range of colours described by the texts can be seen in those schools upon which the Mughal style did not exert much influence, for example the traditional paintings of Orissa and the *phar* paintings of Rajasthan. Both these expressions adopt natural colours which we find in texts. Furthermore, in the case of colours, texts can be considered a means by which to judge painting. Some of the painters interviewed, notably Lalit Sharma (Udaipur) (Figure 128), accorded significance to the use of natural colours in traditional painting, which were seen to define the 'essence' of tradition, as opposed to the modern application of artificial colours (Figure 127).



A trend identified in this study with important implications for future research is the ongoing shift of painters away from texts. Most practitioners interviewed ignore the importance of the *citrasutras* and sought to acquire new techniques from within their own families or following new trends, like in the use of artificial colours. Only in one instance was some interest expressed in the texts: a painter in Raghurajpur sought to revive this ancient knowledge from reading the English translation of the *Vastusutra Upanishad* (Boner, 1982). The result of his reading was the drawing of different concepts like weapons for the representation of gods (Figure 132) and of images of gods like Mahishasuramardini (Figure 133). This denotes that painters themselves seem confused about the use of the texts.

The understanding of the texts proposed in this study offers many possibilities for future research to refine our conceptualisation of the *citrasutras* and may even be of use to practising artists. As demonstrated, texts are adaptable and do not prescribe any fixed style, so practitioners can read a text in terms of the style learnt by their families and can seek to apply the texts as they wish in developing and organising their ideas. Another possible use of the texts suggested in this study is that their theoretical expositions serve as a 'critical principle' by which the practice of painting can be judged. Once we understand the essence of the messages of the theory we can use it to look at Indian art in terms of appropriate measurement, *talamana*, postures, *mudras*, and so on. This approach goes beyond the usual preoccupations of Indian art criticism which is often overly preoccupied with stylistic analysis<sup>1</sup> and the symbolism of images. For example Kramrish, who translated the *Vishnudharmottara*, used symbolism and mythology as the main criteria by which to understand sculpture and painting. One example is her description of Vishnu Trivikrama (Figure 134) (Kramrish 1976, p. 403-404):

Visnu, with three strides covers the whole universe. Incarnated as a dwarf, Vamana, he had asked Bali, the King of the Asuras, for a boon; he wanted only as much land as to step on... Then he takes his strides across all space, a cosmic movement in which the image of Visnu is a counter-part in its own right, to that of Siva Nataraja. The thrust of his left leg ends to the "Face above", to Rahu.

<sup>1</sup> For a discussion on the relevance of stylistic analysis in the study of Indian art see the article "Silpa versus Sastra" by T.S. Maxwell in Dallapiccola (ed.) *Shastric Traditions in Indian Arts*.

While mythology may be one of the keys to read painting and sculpture, there are many other practical and technical aspects that can be seen in Indian art, such as the kind of *tala*, *mudras*, weapons, postures and *rasas* employed in the portrayal of Vishnu. Thus, while the *citrasutras* describe these aspects as fundamental to make good painting or sculpture, they have rarely been applied in analysing Indian art. Most importantly and critically for scholarship, however, it is hoped that the understanding of the *citrasutras* proposed in this study will help scholars to further illuminate the complex interrelationship between the theory and practice of Indian painting.

## Appendix I

### Depiction of Animals

Some of the texts considered in this study not only focus their attention on the measurement and proportion of the human body, but also contain information on the measurement of animals. The *Manasollasa*, for example, explains horses and elephants. The figure of the horse or *hayacitra* (Man II.1.836-874) is delineated in all details as we have seen for the human body, with height, breadth and circumference. The same is true for the figure of the elephant or *gajacitra* (II.1.847-899). The *Shilparatna* (II.21.1-10) explains the figure of the bull (see Bhattacharya 1976, pp. 141-150). Interesting descriptions of these animals are to be found in the *Shukraniti*. They are delineated with their measurements but their description seems to have a different purpose from the pictorial one: it seeks to decide about their auspiciousness or inauspiciousness. As for the five men, there are four kinds of elephants: *bhadra*, *mandra*, *mrga* and *mishra*. For example, the *bhadra* elephant has tusks coloured like honey, is strong and well formed, is round and fat in body, has a good face and excellent limbs. The *mandra* elephant has a fat belly, lion-like eyes, thick skin, thick throat and thick trunk, medium limbs and a long body. The *mrga* elephant has a small or short throat, tusk, ears and trunk, big eyes and very short lips and genital organ, and is a dwarf. The *mishra* elephant is that which has these characteristics in a mixture. These elephants have different measurements. For the measurement of an elephant one *angula* is made by eight *yavas* and one cubit is made by twenty-four *angulas*. In the *bhadra* class, for example, the *Shukraniti* states that the height is seven cubits, the length is eight cubits and the circumference of the belly is ten cubits. The text also clarifies that the best of all elephants is that which has long cheeks, eyebrows and forehead, has the swiftest speed, and has auspicious marks on the body (*Shukraniti* 4.7.68-84 in Sarkar 1975, pp. 220-221). Even more detailed is the description of horses in which the measurements of length, height, girth and interspaces of all limbs are given. From the measurement follows a long list of auspicious marks, defects, speed etc. (*Shukraniti* 4.7 in Sarkar 1975, pp. 221-233).

## Appendix II

### Depiction of Designs

Other sections of the texts considered in this study involve the descriptions of designs. The practice of bordering a painting with flower designs is an important feature of Indian painting. According to the *Aryamanjushri-mulakalpa*, every side of a painted canvas should be decorated with the representation of various flowers like *nagakeshara*, *punnaga*, *bakula*, *malati*, *priyangu*, *kuruvaka*, blue lotus and white lotus (Bhattacharya 1976, p. 151). The *Aparajitaprccha* is one of the texts that systematically classifies designs. The text (Apar 277.32-34) states that designs are to be used in architecture and sculpture. More properly it explains that these designs should be drawn on pillars, doorjambs and all possible places of palaces and temples. However, as already pointed out in this study, we can consider the passages of this text as part of the *citrasutras* as well, because the abstract characteristic of the descriptions and the absence of drawings in their explanations makes the system of classification of the *Aparajitaprccha* relevant to painting, too.

The *Aparajitaprccha* (chapters 227-228) refers to different categories of design and to the appropriate moments in which they can be used. There are *dina patra* or designs associated with the lunar movements, *rtu patra* or designs associated with the seasonal movements, *jala patra* or designs deriving from aquatic forms, *sthala patra* deriving from earthly forms, *nara patra* deriving from human form, *gajodbhava patra* deriving from elephant form and *megha patra* deriving from cloud forms.

The *Aparajitaprccha* (227.17-20) records that the *dina patras* are fifteen in number and they follow the discipline of the lunar days. The lunar days are *nanda*, *bhadra*, *jaya*, *rikta* and *purna* which repeat three times to cover fifteen days of the moon's diurnal movement. On the days called *nanda* one should draw *shishu patra*, on *bhadra* days *sakala patra*, on *jaya* days *svastika patra*, on *rikta* days *vardhamanaka patra*, and on *purna* days *sarvatobhadra* types of *dina patra*. The text adds that these five principal types of designs have sixteen varieties each, and by permutation and combination of their forms innumerable designs may be created (Bhattacharya 1976, pp. 153-154).

As regards the *rtu patras* it is stated in the *Aparajitaprccha* (277.24-25) that in the *vasanta* (spring) the *nagara* design should be used, in the *grishma* (summer) the *dravida*, in the *varsha* (rainy) season the *vyantara*, in the *sharad* (autumn) the *vesara*, in the *hemanta* (winter) season the *kalinga* and in the *shishira* (cool) season the *yamuna* type of design should be delineated (Bhattacharya 1976, p. 154). It may be noted that the names of the *rtu* designs are the same as the names of the classification of painting (see chapter 2).

The *jala patra* (ApaPr 227.28-31) are *hamsa patra* or goose design, *nakra patra* or crocodile design, *matsya patra* or fish design, *kurma patra* or tortoise design and *padma patra* or lotus design. *Sthala patra* is subdivided into *nara patra* representing human beings, *gaja patra* representing elephants, *ashva patra* representing horse design. *Megha patra* is also said to be of various forms (Bhattacharya 1976, pp. 154-155).

The *Aparajitaprccha* (228) deals not only with the *patra* or leaf design, but also *shakha* and *kantaka* or branch and thorn designs. Among the *kantaka* designs are the *kali-kantaka* representing the form of the *agasti* flower, *nagara kantaka* representing the nail of a tiger, the *dravida kantaka* representing the thorn of *vadari ketaki*, the *vyantara* representing the boar tusk, the *vesara kantaka* is like the *mani pushpa*, the *kalinga* like the letter of the *devanagari* "u" and the *yamuna* is represented with a flower in the middle (Bhattacharya 1976, p. 155).

## Appendix III

### Depiction of Backgrounds

The *Vishnudharmottara* (ViDha 42.58-81 in Dave Mukherji 2001, pp. 206-217) is the only text taken into consideration in this study which enumerates backgrounds for painting. Landscape painting is not a traditional genre of India. This means that we should consider the following descriptions as a classification of backgrounds of a narrative painting.

The text (42.58-68) explains that sky is to be shown with its own colour and should be full of birds. The night is to be represented with the sky studded with stars, and the earth is to be depicted arid, watery and mixed. Mountains are to be shown by a multitude of rocks, peaks, minerals, trees, waterfalls and snakes. The forest is to be represented by different types of trees, birds and beasts of prey and by waters with fishes and tortoises and lotuses. A city should be shown with various kinds of temples, palaces, shops, houses and highways. The villages are represented by settlements and gardens. The fortresses should be made as located on appropriate ground and with mounds, watchtowers and hillocks. The market place should be made full of articles of trade. The drinking places should have alcoholic liquors and be crowded with people. The people seated for gambling should be portrayed without their upper garments. The losers are to be depicted overwhelmed with grief and the winners should be joyful. The battlefield should be represented smeared with blood, with limbs of the dead, accompanied with attacking men. The funeral ground should be full of dead bodies and funeral pyres. The caravan road should be shown by camels carrying burdens.

The *Vishnudharmottara* (42.69-73) also describes the periods of the day. The night should be represented by people sleeping, a thief in the proximity and by the ordinary happenings made visible by the moon, planets and the stars. In the first half of the night, an *abhisarika* is to be shown. The dawn is represented accompanied by the rising sun, dimmed lamps and cocks shown crying. The day is usually painted by men toiling away at work. The dusk should be depicted reddish with the twice-borns engaged in their rituals. The darkness is made visible by showing people reaching out with their hands. The moonlight is portrayed by blooming of the lotuses and the moon.

A gale is to be shown by depicting dust and scattered leaves. The rain is represented by a downpour and people going out with their umbrellas.

The *Vishnudharmottara* (42.74-81) explains the characteristics of the seasons whose representation should be done after observing the world and in accordance with flowers and fruits of the trees and also the ruttishness of the animals. Spring (*vasanta*) is portrayed by overjoyed men and women, swarms of bees, cuckoo birds, flowers and trees which blossom in this season. The summer (*grishma*) is represented by fatigued people, deer lying under the shade, the creatures languid and suffering due to the sun and by buffaloes sporting in the mud, dried up ponds, birds clinging to the trees for shade, and lions and tigers resorting to caves. The rainy season (*pravrsham*) is shown with water laden clouds, rainbows and flashes of thunderbolt. The autumn season (*sharad*) is painted with lakes full of swans and lotuses, with fields full of ripened corns and trees laden with fruits. The winter (*hemanta*) is to be depicted with horizons full of fog, fields in harvest, and mist hanging over the water areas. The cool season (*shishira*) is to be painted with snow obscured horizons, people huddling together afflicted with cold and with delighted elephants and crows.

## Glossary

Abhraka	Mica
Āgama	Class of literature comprising the sacred writings belonging to the religious sects of the Vaiṣṇava, Śaiva and Śākta.
Āṅgula	Āṅgul (H) Digit. Measurement of length constituted by 8 barley grains, or breadth of the middle phalanx of the middle finger of a body. In an image it is a relative unit that depends on the length of the image itself and can be calculated by dividing the face or tāla into 12 parts.
Anubhāva	Consequence. Sign or indication of a rasa. Physical or exterior effects of the rasa on the character. They vary for each rasa, for example in the representation of the śṛṅgāra rasa they may be regarded as smiles and graceful movements.
Ardhacitra	(lit. half of a citra) According to the Śilparatna it is one of the three kinds of citra and it indicates relief. The other two kinds are citra itself and citrabhāsa.
Āsana	Sitting posture. The word denotes the position of feet and legs of an image in a sitting posture. Among them are, for example, sukhāsana, viṣamāsana, svastikāsana, yogāsana, kukkuṭāsana and vīrāsana.
Asura	Demon, enemy of the gods.
Aviddha	Mere resemblance of an object. Kind of painting according to the classification of the Mānasollāsa and Abhilaṣitārthacintāmaṇi.
Āyudha	Weapon, emblem of a god.
Bhauma	(lit. related to the earth) According to the Nārada Śilpa Śāstra, this is a kind of painting executed on the floor.
Bhāvacitra	According to the classification of the Mānasollāsa and Abhilaṣitārthacintāmaṇi it is a kind of painting that represents a rasa.



Brahma-sūtra	Practical or imaginary line that divides the body of an image vertically into two equal parts, passing through the middle of the eyebrows to the middle of the feet.
Cakravartin	Cakravartin is a universal monarch or emperor of the world. According to Monier-Williams (1994) cakravartin is "a ruler the wheels of whose chariot roll every-where without obstruction". It is a title used by Hindus for kings but it is a word commonly used also in Buddhist and Jaina contexts. In the Citralakṣaṇa of Nagnajit, the cakravartin is one of the pañcapuruṣas and he represents a stereotype or an ideal model for painting.
Citra	In its general meaning it designates a painting. When the word citra is used in the citrasūtra, it may denote a mental image. The word is used abstractedly to explain the theory. In some contexts, like for example in the Śilparatna, citra may also acquire the meaning of sculpture (see also citrābhāsa and ardhacitra).
Citrābhāsa	Painting or semblance (ābhāsa) of citra. According to the Śilparatna this is one of the three kinds of citra (see also ardhacitra and citra).
Citalakṣaṇa	(citra: picture, sketch, delineation and lakṣaṇa: characteristic, sign) The word denotes all the texts and sections of a text dealing with the characteristics of citra. See also citrasūtra
Citrasūtra	(citra: picture, sketch, delineation and sūtra: aphoristic rule) Treatise on citra. The word denotes all the texts and sections of a text dealing with citra.
Deva	God, deity.
Dhūlicitra	Painting made with powdered colours on the floor. This is a kind of painting according to the classification of the Mānasollāsa and Abhilaṣitārthacintāmaṇi. It is generally called raṅgolī (H).
Dhvani	(lit. sound) Power of suggestion or of revelation. According to the concept of poetics developed by Ānandavardhana in his Dhvanyāloka, dhvani is one of the semantic powers of a sentence and can be defined as the essence or the aim of poetry.

Draviḍa	According to the Aparājitapṛcchā, this is a kind of painting originated in Karnataka it is associated with the red colour and the kṣatriya caste.
Gairika	Red ochre also called gerū (H). Source of terracotta colour.
Gala	(lit: neck) According to the Citrakarmasāstra it is the fleshy part below the chin, especially in images representing Buddha.
Gandharva	Celestial musicians. Class of demi-gods dwelling in the sky or atmosphere.
Goji	Small dimple lying above the upper lip of a human body or image.
Golaka	Measurement of length constituted by 2 aṅgulas.
Haṃsa	According to the Viṣṇudharmottara he is the best of men whose proportions should be taken as example to derive the other pañcapuruṣas. In the Citralakṣaṇa of Nagnajit he is called cakravartin.
Haritāla	Orpiment (arsenic trisulfide). Source of yellow colour.
Hingula	Vermilion. Source of red colour.
Kalā	Measurement of length constituted by 2 aṅgulas.
Kālinga	According to the Aparājitapṛcchā it is a class of painting that originated in Kālinga (today's Orissa) and it is associated with mixed caste and green colour.
Kanaka	Gold.
Kinnara	(lit. "what man?") Mythical being with the form of a man and the head of a horse.
Kiṭṭa lekhaṇī	(kiṭṭa: cow-dung and lekhaṇī: pen) Crayon.
Kṛṣṇa	Dark colour covering black and dark blue.
Kṣayavṛddhī	(kṣaya: diminishing and vṛddhī: increasing) System developed in the Viṣṇudharmottara with the purpose of describing the stances of a body. The

word refers to the rotation of the body of a man about an axis and to what a viewer, standing in a fixed position, can see of that body.

Kuḍyaka	(from kuḍya: wall) According to the classification of the Nārada Śilpa Śāstra this is a painting executed on wall.
Lakṣā	Red lac. Source of red.
Lakṣaṇa	Characteristic sign. Term common to the sciences of physiognomy, painting and sculpture.
Lambamāna	(lamba: perpendicular and māna: measurement) Measurement taken along the plumb-lines. The major plumb-lines are the brahma-sūtra and pakṣa-sūtras.
Lepyakarma	Priming, plastering.
Māna	(lit: measurement, dimension, length). This term is used with the meaning of measurement of length of the body of an image.
Manahśīla	Realgar (red arsenic). Source of red.
Miśra	Classification of painting according to the Viṣṇudharmottara, that combines the characteristics of satya, vainika/vaishika and nagara.
Mudrā	Position of the hands that conveys meaning to the viewer. Among the most important mudrās are varada, abhaya, sūci, tarjanī, yoga, vyākhyāna, jñāna, añjali, bhūmisparśa and dharmacakra.
Nāga	(lit. snake) Mythical semi-divine being, having a human face and the body of a snake.
Nāgara	Classification of painting according to the Viṣṇudharmottara and Aparājitapṛcchā. The Viṣṇudharmottara states that in this kind of painting the figures are firmly developed and that few garland and ornaments are used. According to the Aparājitapṛcchā, Nāgara is a kind of painting originated in the east of the subcontinent, it is associated with the white colour and the brāhman caste.
Nilā	Indigo. Source of blue.

Nimba	Also nīm (H), <i>Azadirachta indica</i> . Plant used as vegetable gum.
Pāda mudrā	(Also sthāna) Position of feet and legs of a standing image. Among them are: vaiṣṇava, samapāda (also samapada), vaiśākha, maṇḍala, pratyālīḍha and ālīḍha.
Paksha-sūtra	Set of vertical lines, parallel to the brahma-sūtra, that pass through the body of an image.
Pañcapuruṣa	Five stereotypes of men described in the citrasūtras (Viṣṇudharmottara and Citralakṣaṇa of Nagnajit) and in astrological text (Bṛhat Saṃhitā and Sāravālī). They are haṃsa or cakravartin, bhadra, mālavya, rucaka, śaśaka.
Parimāna	(lit: measure of circumference) Measurement of the girth of a part of the body of an image, like the girth of the head or of the arms.
Parkār	(H) Compass.
Paṭa citra	Painting on cloth.
Peori	Indian yellow. English rendering of pevrī (H). The colour is also called pyāvṛī (H) and gaū golī (H) by the painters of Rajasthan.
Phalaka	Wooden plaque for painting.
Pippalī	Small cartilage situated at the entrance to the hole of the ear.
Piśāca	Name of a class of demons.
Pramāna	(lit: measure scale standard) Measurement of breadth of a body of an image. In this study the term is also used with the meaning of proportion.
Pratimā	(lit. statue, figure, image) The word pratimā in its general meaning denotes a statue. When used in the texts, the term does not necessarily mean a sculptural image but can have the more general and abstract connotation of mental image (see also citra).

Pratimālakṣaṇa	(pratimā: statue, figure and lakṣaṇa: characteristic, sign) Section of a text that deals with sculpture or more generally with images, like the Pratimāmānalakṣaṇa.
Preta	(lit. departed, deceased) Ghost, evil spirit.
Purāṇa	(lit. old) Class of sacred books of Hinduism containing ancient legends and celebrating the powers and deeds of gods. Matsya Purāṇa and Viṣṇudharmottara Purāṇa used in this study belong to this kind of literature.
Rajata	Silver.
Rājavarta	Lapis lazuli. Source of blue.
Rākṣasa	Evil or malignant demon.
Rasa	(lit. essence, taste) Aesthetic theory formulated by Bharata in the Nāṭya Śāstra and developed by later theorists. The rasas according to Bharata are: śṛṅgāra (erotic) divided into vipralambha or love in separation and sambhoga or love in union, hāsyā (comic), karuṇa (tragic), raudra (wrathful), vīra (heroic), bhayānaka (terrible), bībhatsā (disgusting), adbhuta (marvellous). In the later developments of the theory other rasas are added. They are: śānta (tranquil), prema (love, affection).
Rasacitra	According to the classification of painting of the Mānasollāsa and Abhilaṣitārthacintāmaṇi, this is a painting made with fluid colours. According to the Śilparatna, rasacitra is a type of painting that represents a rasa.
Rasadṛṣṭi	Glance relevant to the depiction of a rasa.
Samudrika Śāstra	Science of physiognomy. This traditional science describes perfect models of men and it predicts their past and future observing their characteristics, like for example height, weight, gait, compactness and voice.
Satya	According to the classification of the Viṣṇudharmottara, this kind of painting should bear similarity with the world.
Siddha	(lit. accomplished, fulfilled) Class of semi-divine beings.

Śilpa Śāstra	Science of śilpa. Śilpa means artistic work or handicraft and it includes for example architecture, carpentering, jewellery, sculpture and painting. Śilpa Śāstra is the name of a particular class of technical treatises on those arts.
Sindūra	Red lead. Source of red. It may also be the name of a plant whose exudation is used as vegetable gum.
Śrīvatsa	(lit. favourite of Śrī) Auspicious mark generally found on the breast of Viṣṇu, Kṛṣṇa and the tirthaṅkaras.
Sthāna	Stance of the body. Among them are ṛjvāgata or frontal stance, ardharju or half-frontal stance, sākṛta or averted, adhyardhālocana or one-and-a-half-eyed (also called adhyardhākṣa, chāyāgata and dvyardhākṣi), pārśvāgata or profile stance (also called bhittika), parāvṛtta or turned away, prṣṭāgata, purovṛtta and samānata (completely bent).
Sthāyi bhāva	Abiding or permanent emotion. Mental states connected with a rasa. Each rasa has its peculiar sthāyi bhāva. They are: rati or love for śṛṅgāra, hāsa or laughter for hāsyā, śoka or sorrow for karuṇa, krodha or anger for raudra, utsāha or enthusiasm for vīra, bhaya or fright for bhayānaka, jugupsā or disgust for bibhatsā, vismaya or astonishment for adbhuta, śama or tranquillity for śānta, and harṣa happiness for prema.
Śuddha varṇa	(also called mūla varṇa) Primary colours. They vary according to the texts. According to the Śilparatna and Viṣṇudharmottara they are white (sita), yellow (pīta), red (rakta), black (kajjala) and śyāma (dark colour covering black, brown, deep green, deep blue).
Sudhā	Lime or lime plaster.
Śyāma	Dark colour covering black, brown, deep green, deep blue.
Tāla	Linear measurement constituted by 12 aṅgulas. Mukha (lit. face) is one of its synonyms. It may be called bhāg (H) meaning part or division by the artists of today.
Tālamāna	(lit. measurement by tālas) System of rhythmic measurement that permits the creation of images in different proportions. According to the number of times that the face (tāla) stands to the length of the entire body, an image

may vary from a minimum of one tāla (eka-tāla), to a maximum of sixteen tālas (ṣoḍaśa-tāla).

Tāmra	Copper.
Tiryaka-sūtra	Set of lines that pass vertically through the body at certain points like at the level of the eye, of the navel or of the ankle.
Tīrthan̄kara	Jaina saint. Epithet given to the twenty-four masters of Jainism.
Trapu	Tin.
Tūlikā	(also lekhanī) Brush. It can be flat, medium and fine.
Unmāna	(lit: measure of quantity) Term denoting the measurement of thickness of a body like the for example the projection of the nose. This is one of the six ways of measuring the body.
Upamāna	(lit: comparison) Measurement of interspaces of the body of an image, like the measurement of the distance between the two eyes or the two ears.
Ūrdhvaka	(raised, lifted up) According to the classification of the Nārada Śilpa Śāstra, this is a painting executed on the ceiling.
Vaiṇika	(also vaiśika and daiśika) Classification of painting according to the Viṣṇudharmottara in which the figures are elongated, well adorned and completely filled.
Vajralepa	Adamantine medium. Animal glue derived from boiling animal hide.
Vartanā	Line rendering or shading. It can be, according to the Viṣṇudharmottara, of three types: patra (leaf), acchaidika (unbroken) and bindu (dot).
Vartikā	Crayon
Veda	(lit. knowledge) Kind of literature belonging to the śruti or revelation. The Vedas are divided into four collections: Ṛgveda, Sāmaveda, Yajurveda and Atharvaveda.

Vesara	According to the classification of the Aparājitapṛcchā, this is a kind of painting originated in the north of the subcontinent, it is associated with the vaiśya caste and the green colour.
Vibhāva	Determinant. Vibhāvas are factors or objects that determine the arising of a rasa. They can be of two types: objective and stimulative. In the representation of a śṛṅgāra rasa, the beloved would be an objective determinant, and attractive clothing would be a stimulative determinant.
Viddha	According to the Mānasollāsa and Abhilaṣitārthacintāmaṇi, it is a kind of painting which represents an exact copy of an object.
Vidyādhara	(lit. possessor of knowledge) Class of supernatural beings.
Viśvakarma	(Omnificent) The great architect of the universe and personification of the creative power.
Vyabhicāri bhāva	Transitory state. Secondary mental or physical states that accompany the sthāyi bhāvas in the realization of a rasa. Among them are for example discouragement, apprehension, jealousy, embarrassment and intoxication.
Vyantara	According to the Aparājitapṛcchā it is a kind of painting originated in the west of the subcontinent, it is associated with vaiśya caste and yellow colour.
Yakṣa	Class of semi-divine beings attendants of Kubera, the god of wealth.
Yamunā	According to the classification of the Aparājitapṛcchā, it is a kind of painting that belongs to all the regions, it is associated with all the castes and colours.
Yava	Measurement of length constituted by 1/8 of an aṅgula or a barley corn.



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## **Illustrations**



Figure 1 Print representing the image of Vishvakarma from a painter's studio in Nathdvara (Rajasthan). This is a cheap representation easily available from the market. Vishvakarma holds in his hands the Vedas, the cord, the scale and the water pot.



Figure 2 Image of Vishvakarma in a temple of Udaipur (Rajasthan).





Fig. 58. *Satya*, variety in art form,  
Chandella, 10th century A.D.,  
Khajuraho.



Fig. 59. *Vainika*, variety in art form,  
Chandella, 10th century A.D.,  
Khajuraho.

Figures 3 and 4 represent the *satya* and *vainika* types of representation according to the reading and interpretation of the *Vishnudharmottara* by Sivaramamurti (Sivaramamurti 1978, Fig. 58 and Fig. 59)

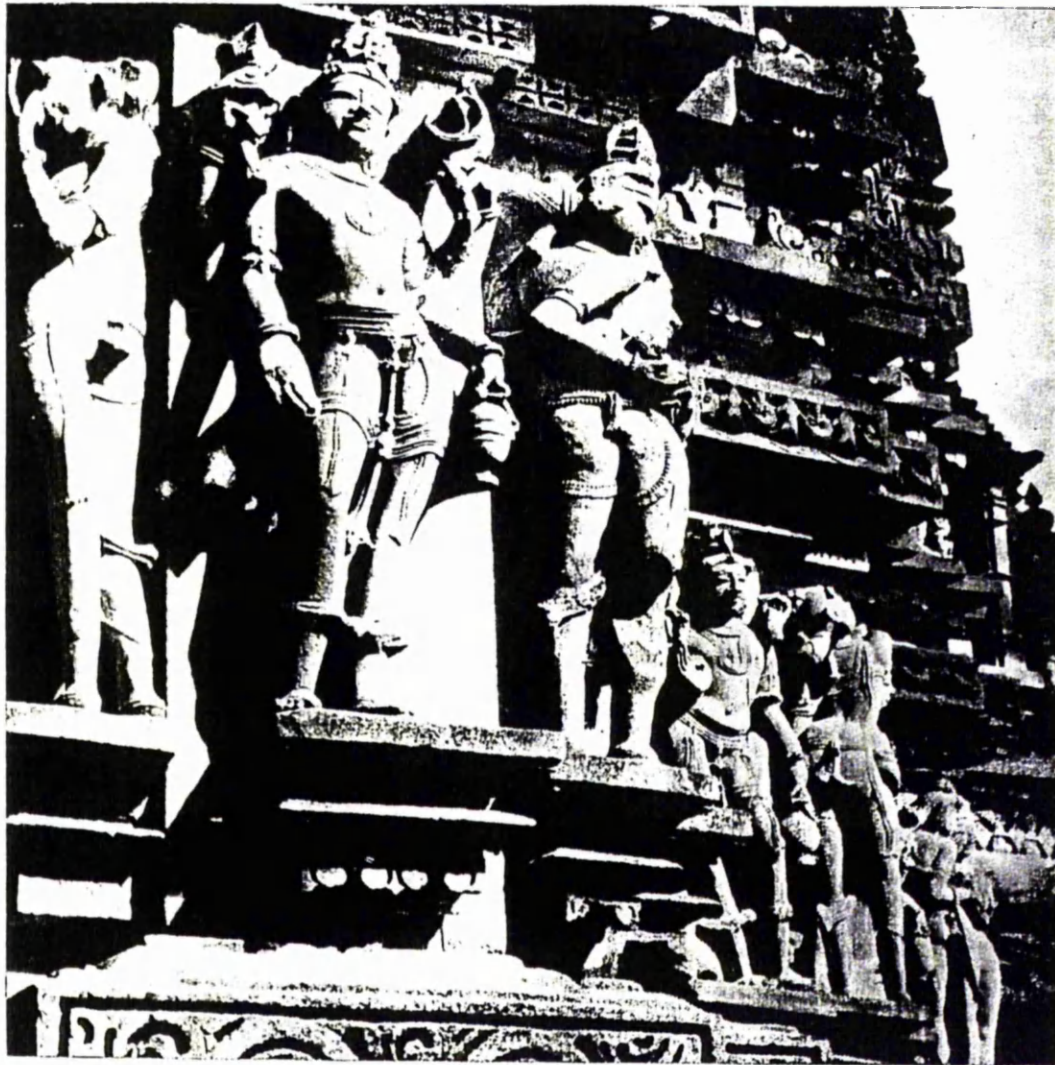


Fig. 60. *Nāgara*, variety in art form, Chandella, 10th century A.D., Khajuraho.

Figure 5 Interpretation of the *nagara* type of representation according to Sivaramamurti (1978, Fig. 60)

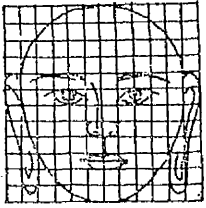


Fig. 2. Length as well as breadth of the face  
= 1 tāla (12 aṅg.).

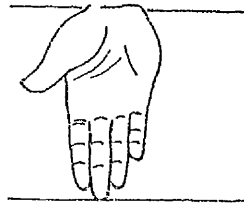
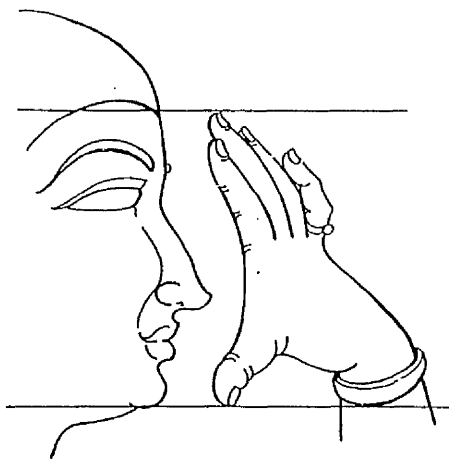
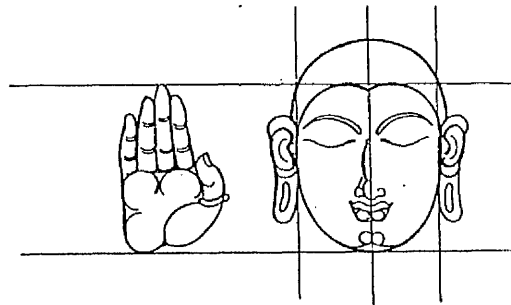


Fig. 3. Length of the hand  
= 1 tāla (12 aṅg.).  
Middle digit of the median  
= 1 aṅg.

Figure 6 Representation of *tala* and *mukha* of 12 *angulas* according to Banerjea (1941, plate VI)



LENGTH OF FACE



CORRESPONDING LENGTH OF  
FACE AND HAND

Figure 7 Representation of *tala* and *mukha* according to Ganapati Sthapati (2002, p. 282)



THE HAMSA MODE  
[NAVATĀLA]

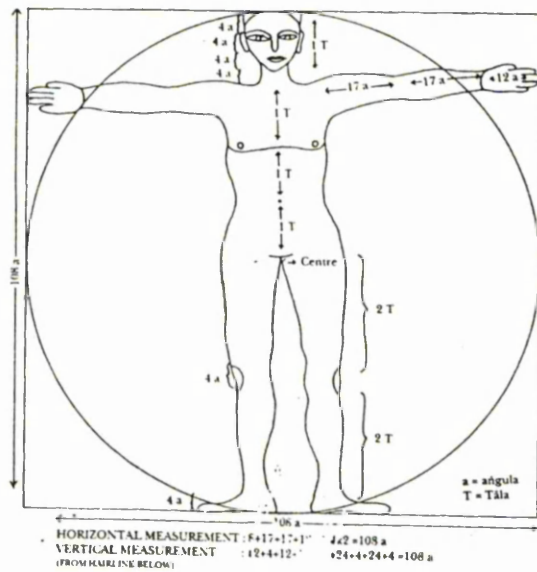


Figure 8 Representation of the *hamsa* stereotype according to Dave Mukherji (2001, diagram III)

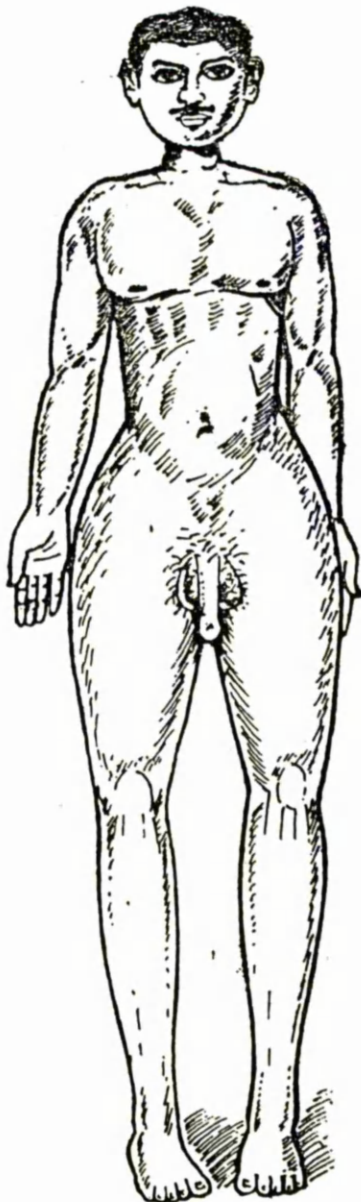


Figure 9 Representation of the *hamsa* stereotype according to Chatterjee Sastri (1971)



THE BHADRA MODE

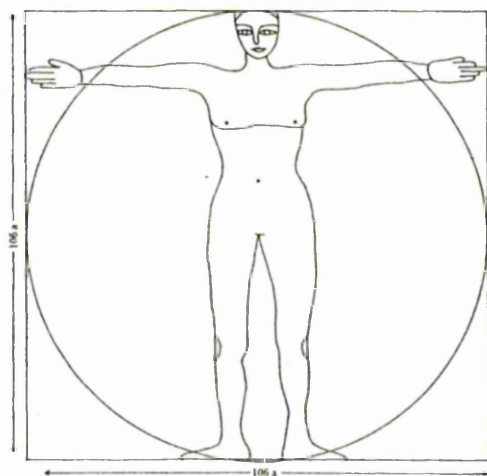


Figure 10 Representation of the *bhadra* type (Dave Mukherji 2001, diagram IV)

THE MĀLAVYA MODE

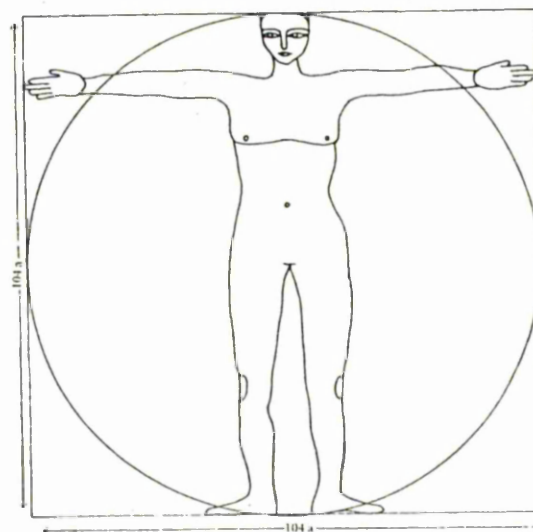


Figure 11 Representation of the *malavya* type (Dave Mukherji 2001, diagram V)

THE RUCAKA MODE

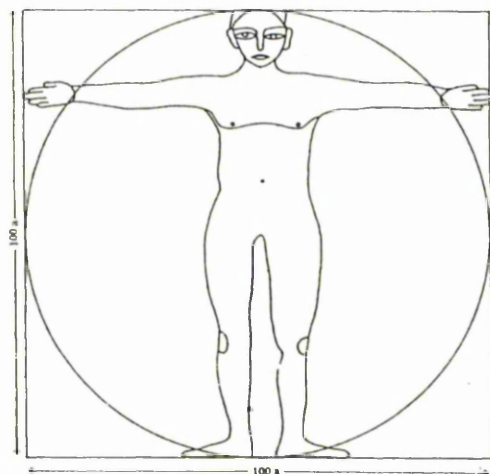


Figure 12 Representation of the *rucaka* type (Dave Mukherji 2001, diagram VI)

THE ŚAŚAKA MODE

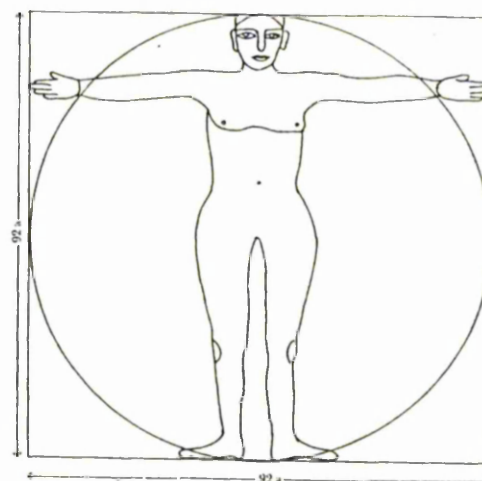


Figure 13 Representation of the *śaśaka* type (Dave Mukherji 2001, diagram VII)

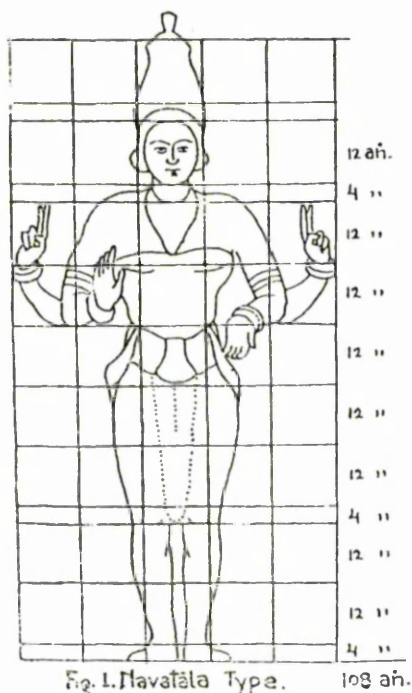
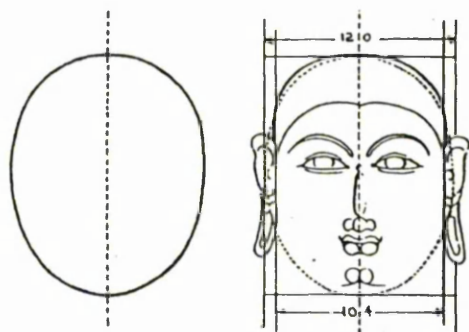
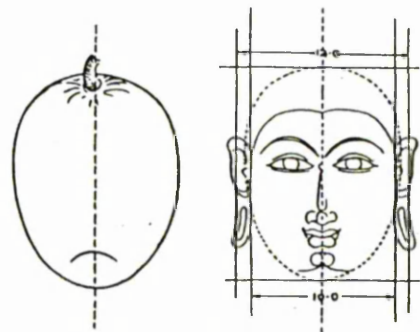


Fig. 1. Navatāla Type.  
After Bhāṭṣaṃhitā

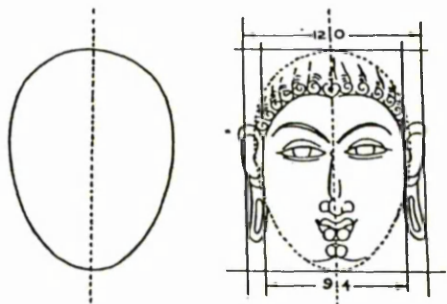
Figure 14 Representation of an image of 108 *angulas* in height corresponding to a *nava tala* measurement (Banerjea 1941, plate VI)



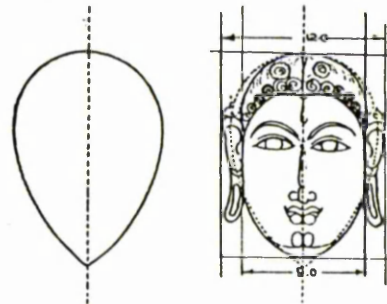
FACE IN THE SHAPE OF THE TAMIL LETTER 'Va'



MANGO-SHAPED FACE



EGG-SHAPED FACE



SESAME-SHAPED FACE

Figure 15 Representation of four kinds of faces according to Ganapati Sthapathi (2002, p. 286).



Fig. 64. Face delineation: *vakra*, *triakoṇa*, *maṇḍala*, *dirgha*

Figure 16 Forms of the face to be avoided for the depiction of gods according to the *Vishnudharmottara* (Sivaramamurti 1978, Fig. 64, p. 76)



Figure 17 Representation of the eye shaped like a bow according to Sivaramamurti (1978, Fig. 46, p. 52)

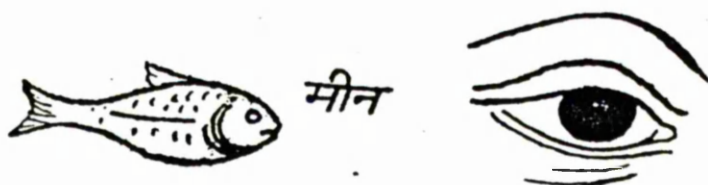
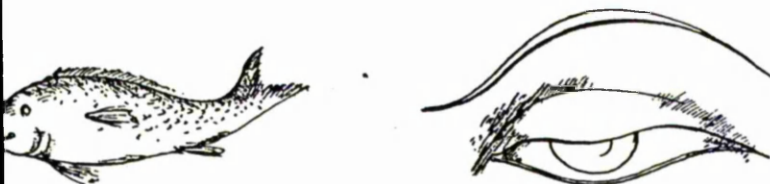


Figure 18 Representation of the eye shaped like a fish according to Dvivedi and Dube (1999, p. 24), Ganapati Sthapati (2002, p. 287) and Sivaramamurti (1978, Fig. 46, p. 52)



EYE SHAPED LIKE A FISH





Figure 19 Representation of the eye shaped like a petal of the blue lotus *utpala* (Dvivedi and Dube 1999, p. 24 and Sivaramamurti 1978, Fig. 46, p. 52)

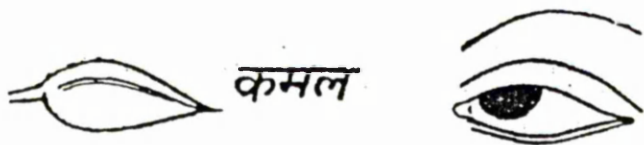
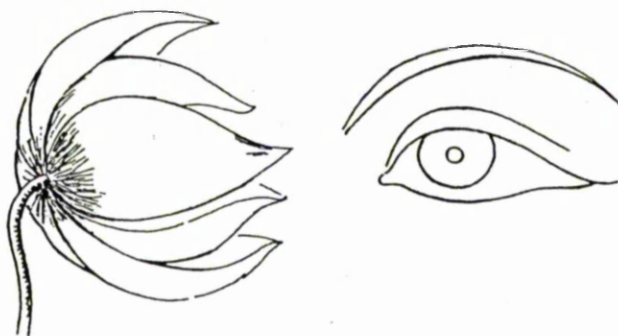


Figure 20 Representation of the eye shaped like a petal of the lotus *padma* according to Dvivedi and Dube (1999, p. 24), Ganapati Sthapati (2002, p. 287) and Sivaramamurti (1978, Fig. 46, p. 52)



LOTUS - SHAPED EYE



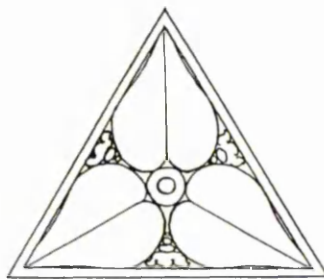
Figure 21 Representation of the eye shaped like a shell (*shankha*) (Sivaramamurti 1978, Fig. 46, p. 52)







SRIVATSAM (a)



SRIVATSAM (b)

Figure 22 Representations of *shrivatsa* marks according to Sthapati (2002, p. 190)



Fig. 103. Yoganarayana, 16th-17th century, Triprayar

Figure 23 Medieval Kerala painting from Triprayar (Sivaramamurti 1994, Fig. 103, p. 127)



Figure 24 Medieval Singhalese painting from Hindagala (Sri Lanka)





ཕ་ར་ན་མིར་ཆོས་འཁོར་གྱི་རྒྱུད།

Buddha first Sermon at Varanasi

Figure 25 Tibetan traditional painting (20<sup>th</sup> century) by the traditional artist Phuntsok Sangpo (Sangpo 1996, p. 147)



Figure 26 The sculptor Ram Prasad Sharma explaining the measurement of Lakshmi

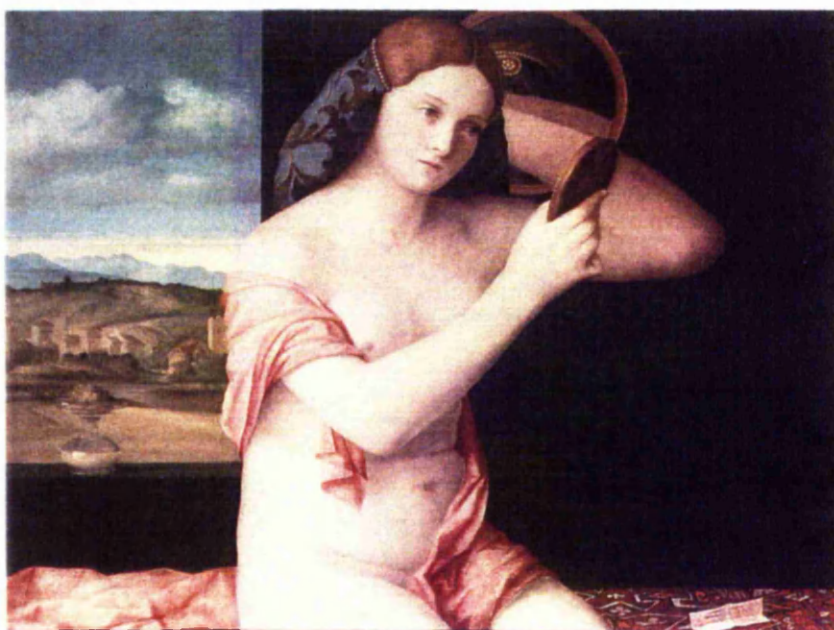


Figure 27 *Young Woman with a Mirror* (1515) by Giovanni Bellini (De Vecchi and Cerchiari, *Arte nel Tempo*, vol. 2)





Figure 28 Use of the compass (*parkar*) by a sculptor in the Jaina studio



Figure 29 Jaina studio in the Murti Mohalla, Jaipur

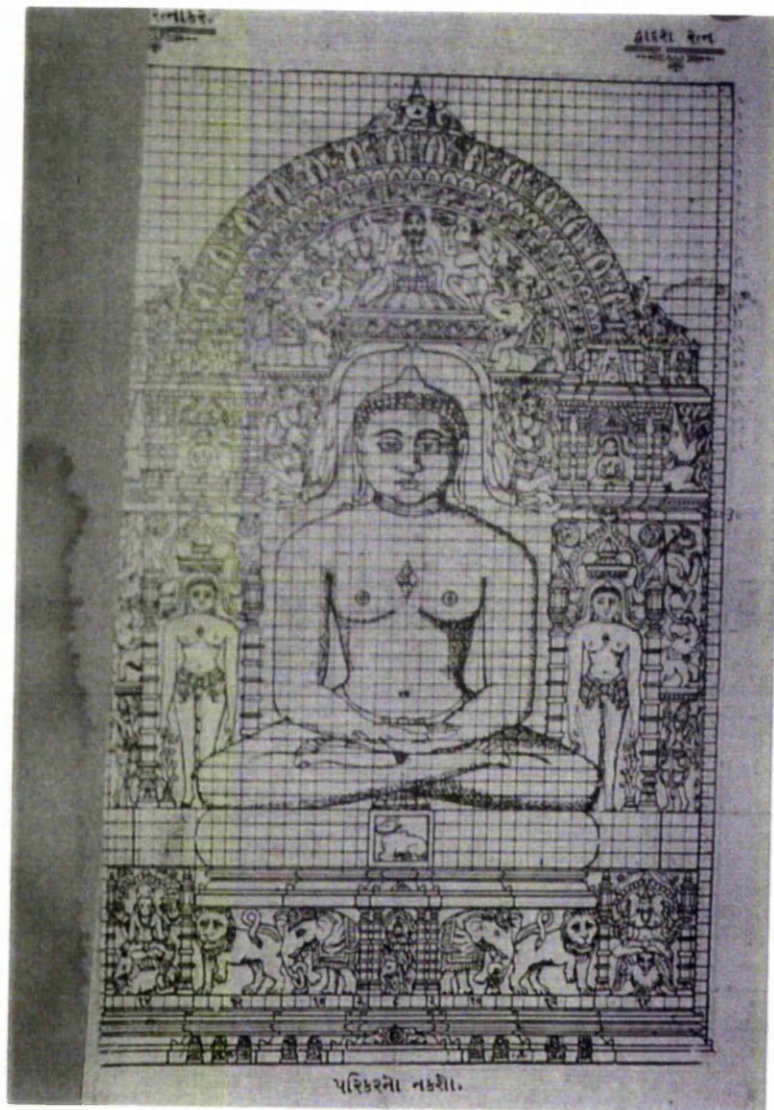


Figure 30 Illustration of the twelfth *tirthankara* Vasupujya

No.	Name of the <i>tāla</i> measure.	Division of the <i>tāla</i> measure.	Total length of the imago.	Length of the face.	Proportion between the length and the <i>tāla</i> .
			aṅgulas.		approxly.
1	Daśa-tāla measure	a. Uttama	124	13½	9
		b. Madhyama	120	13	9¼
		c. Adhama	116	12½	9½
2	Nava-tāla measure	a. Uttama	112	12	9½
		b. Madhyama	108	11½	9½
		c. Adhama	104	11¼	9¼
3	Aṣṭa-tāla measure	a. Uttama	100	10¾	9½
		b. Madhyama	96	..	..
		c. Adhama	92	..	..
4	Sapta-tāla measure	a. Uttama	88	..	..
		b. Madhyama	84	..	..
		c. Adhama	80	..	..
5	Ṣaṭ-tāla-measure	a. Uttama	76	8½	9
		b. Madhyama	72	..	..
		c. Adhama	68	..	..
6	Pañcha-tāla measure	a. Uttama	64	..	..
		b. Madhyama	60	..	..
		c. Adhama	56	..	..
7	Chatuṣ-tāla measure	a. Uttama	52	7	7½
		b. Madhyama	48	8	6
		c. Adhama	44	..	..
8	Tritāla measure	a. Uttama	40	..	..
		b. Madhyama	36	..	..
		c. Adhama	32	..	..
9	Dvitāla measure	a. Uttama	28	..	..
		b. Madhyama	24	..	..
		c. Adhama	20	..	..
10	Ekatāla measure	a. Uttama	16	..	..
		b. Madhyama	12	..	..
		c. Adhama	8	..	..

Figure 31 Table of *talamana* measurements according to Rao (1920, pp. 36-37)



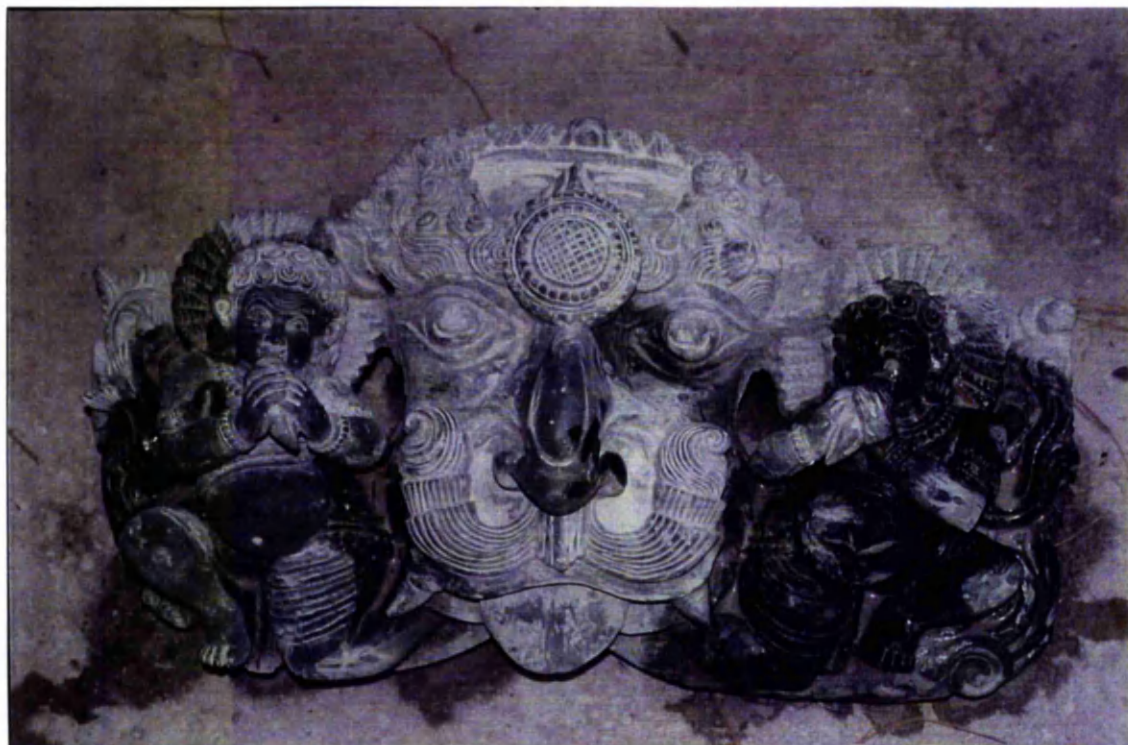
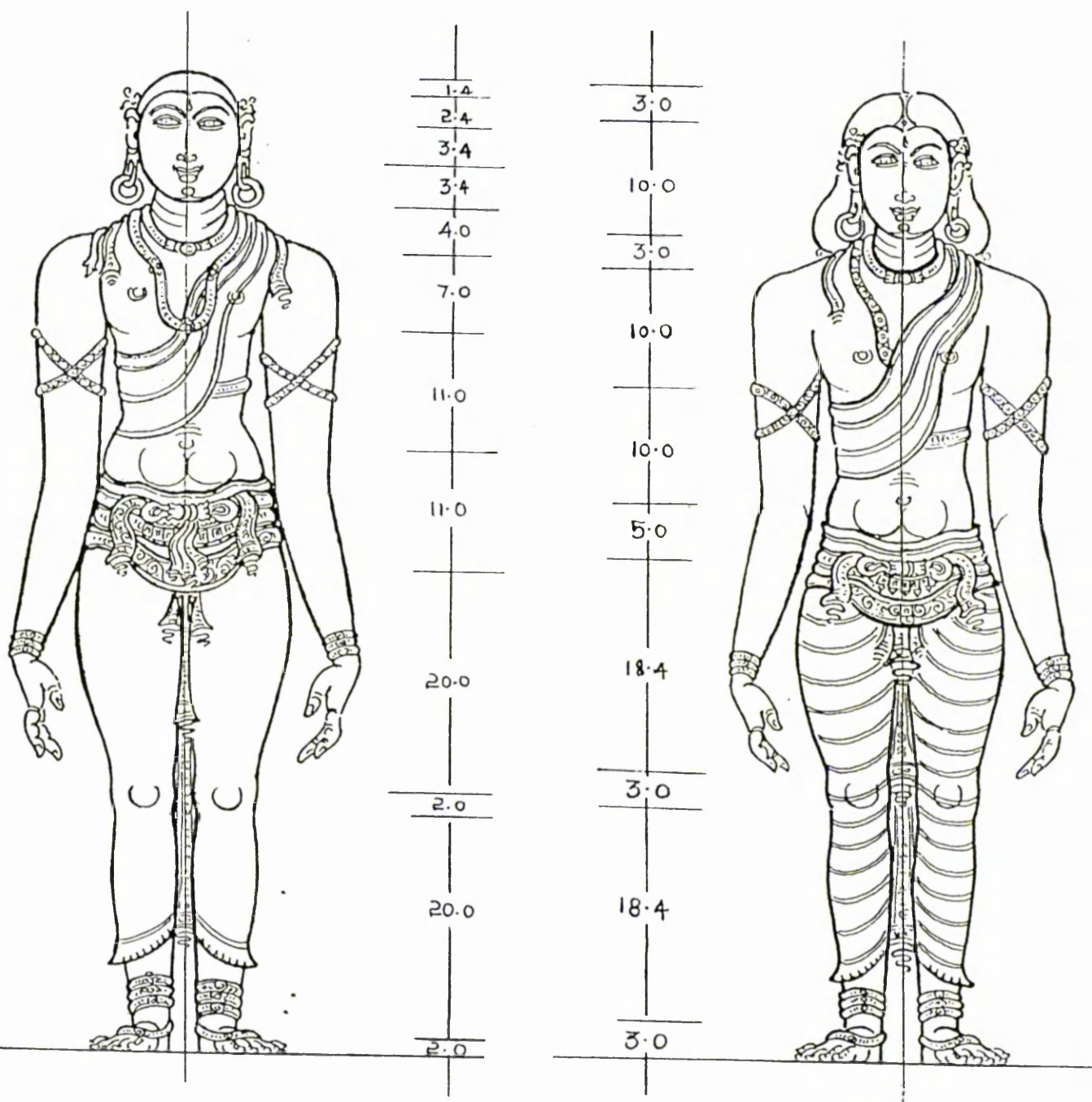


Figure 32 Examples of *kirtimukha*. The top image represents a *kirtimukha* made by a sculptor in Bhubaneshvar (Orissa). The image above shows a *kirtimukha* detail from the Mukteshvara temple (10<sup>th</sup> century) in Bhubaneshvar.



HUMAN FIGURES IN  
UTTAMA SAPTATALA

LINEAR MEASUREMENTS IN THE  
MADHYAMA SAPTATALA SCALE

Figure 33 Representation of *uttama* and *madhyama-sapta-tala* according to Ganapati Sthapati (2002, p. 405)



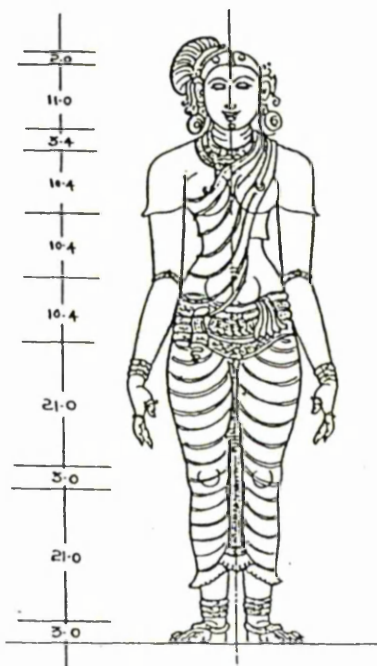


Figure 34 Representation of *madhyama-ashta-tala* according to Ganapati Sthapati (2002, p. 398).

### LINEAR MEASUREMENTS OF A FEMALE IMAGE IN THE MADHYAMA ASHTATALA SCALE

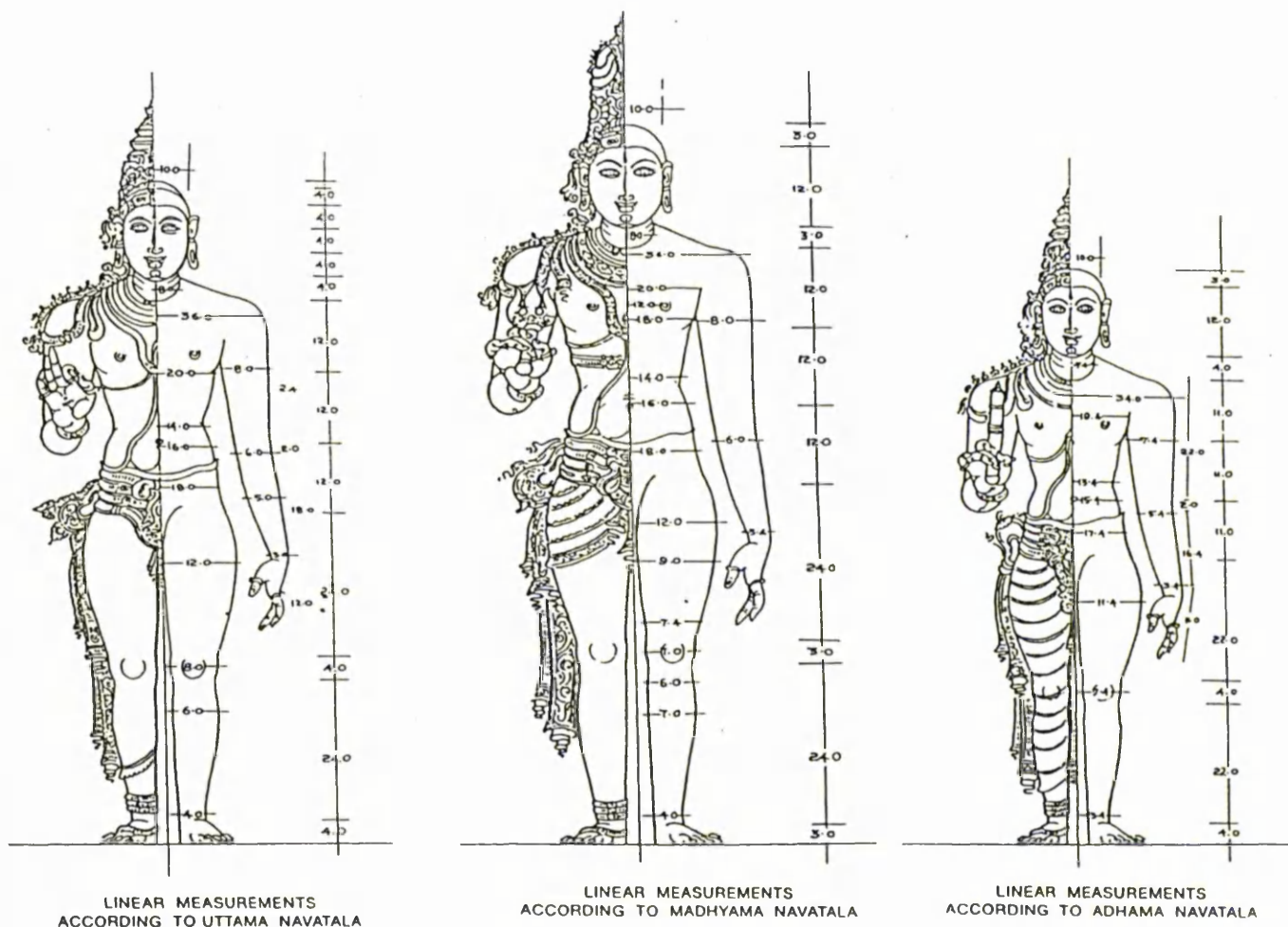
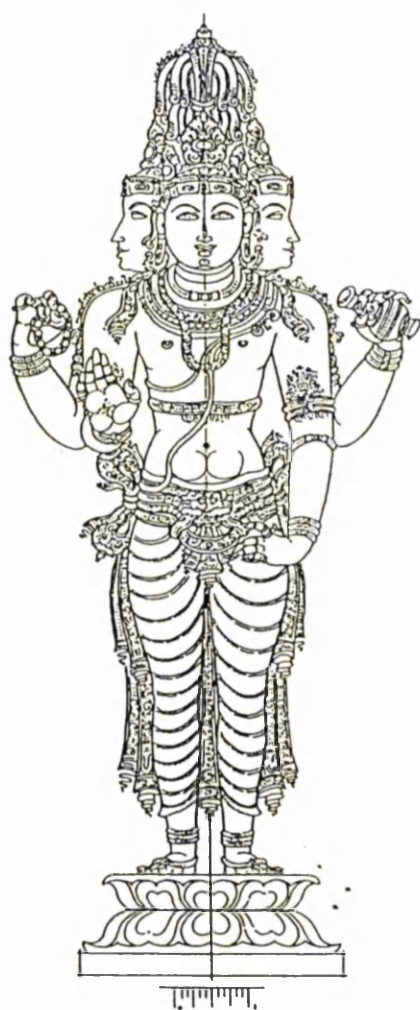
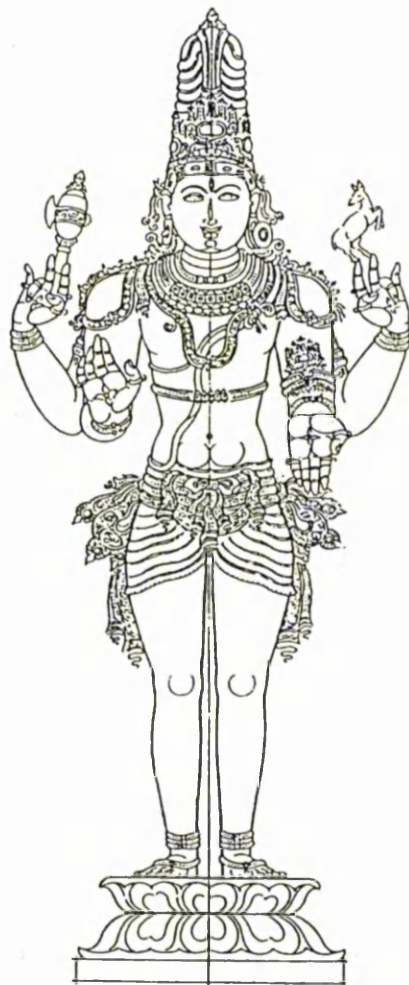


Figure 35 Representation of *uttama*, *madhyama* and *adhama-nava-tala* according to Ganapati Sthapati (2002, pp. 376, 384, 386)



BRAHMA (UTTAMA DASATALA)



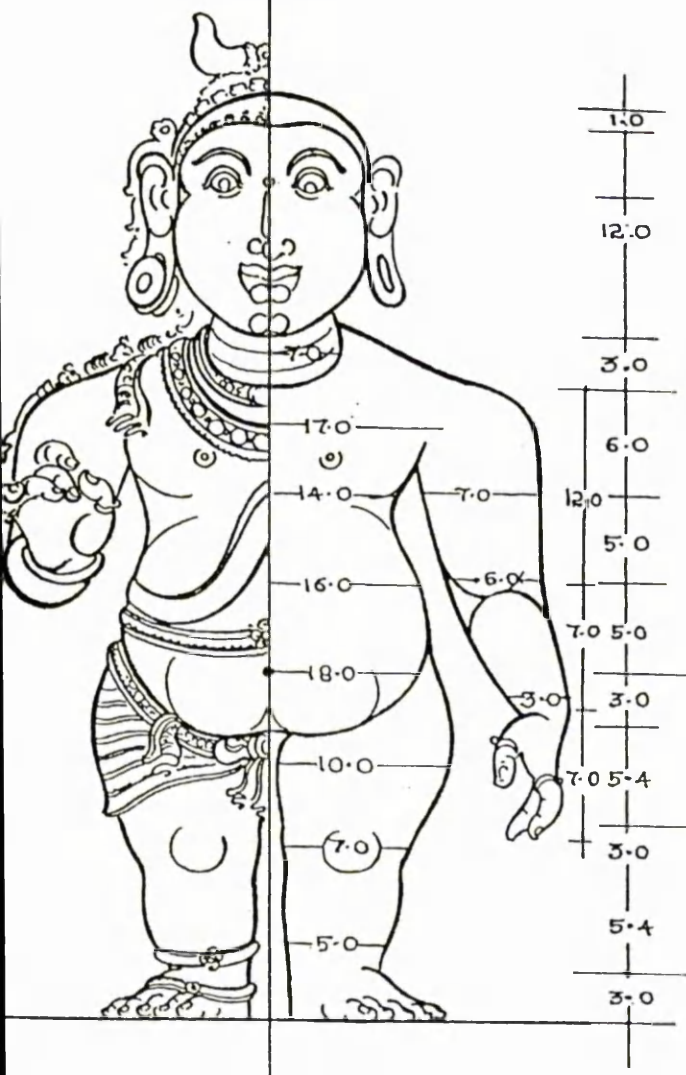
SHIVA (UTTAMA DASATALA)



VISHNU (UTTAMA DASATALA)

Figure 36 Representation of Brahma, Shiva and Vishnu according to the *uttama-dashatala* (Ganapati Sthapati 2002, pp. 308, 309)





UTTAMA CHATUSTALA SCALE

Figure 37 Representation of a *bhuta* according to the *catus-tala* (Ganapati Sthapati 2002, p. 441)

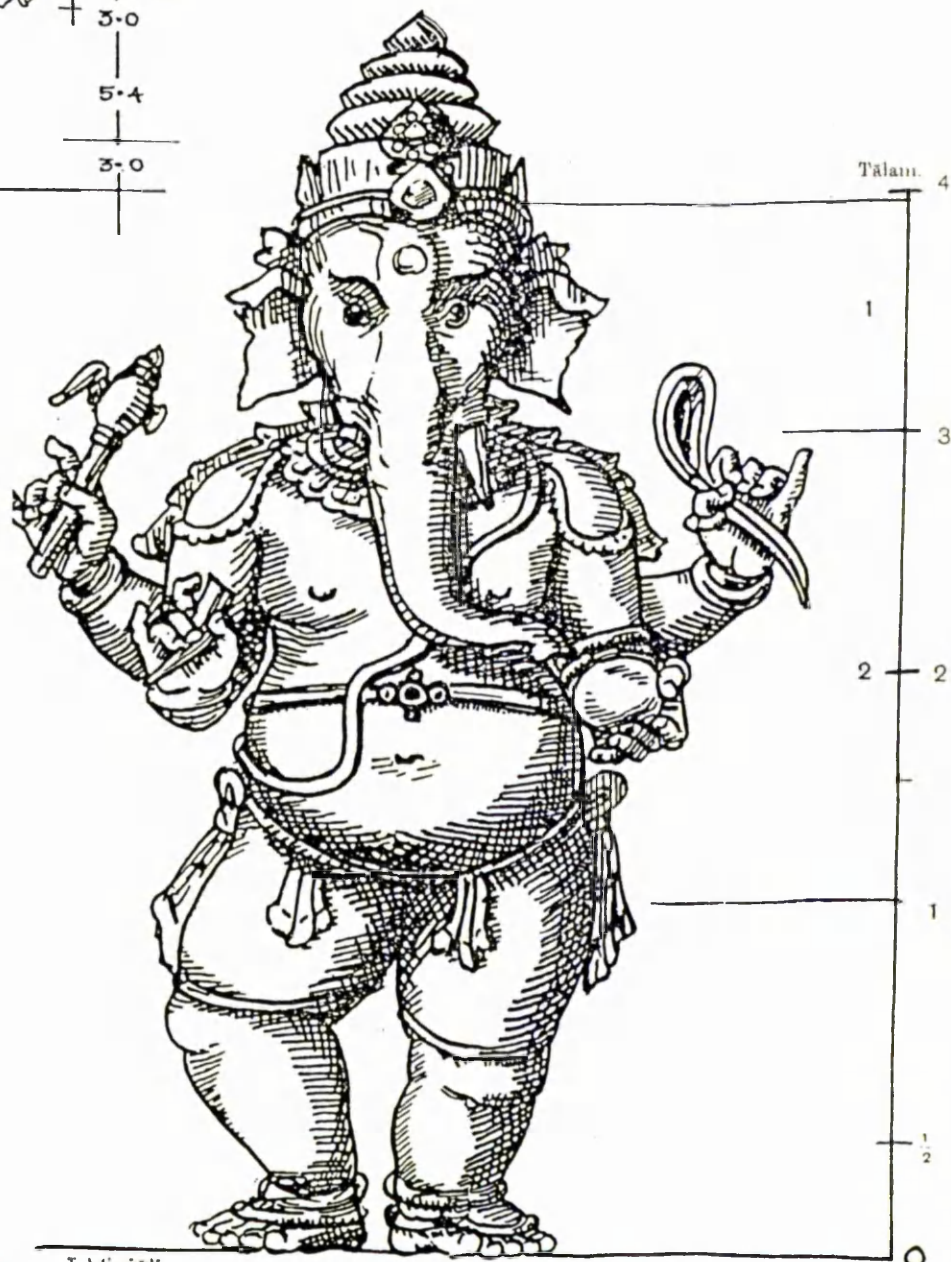


Figure 38 Representation of Ganesha according to the *catus-tala* (Rao, 1920)





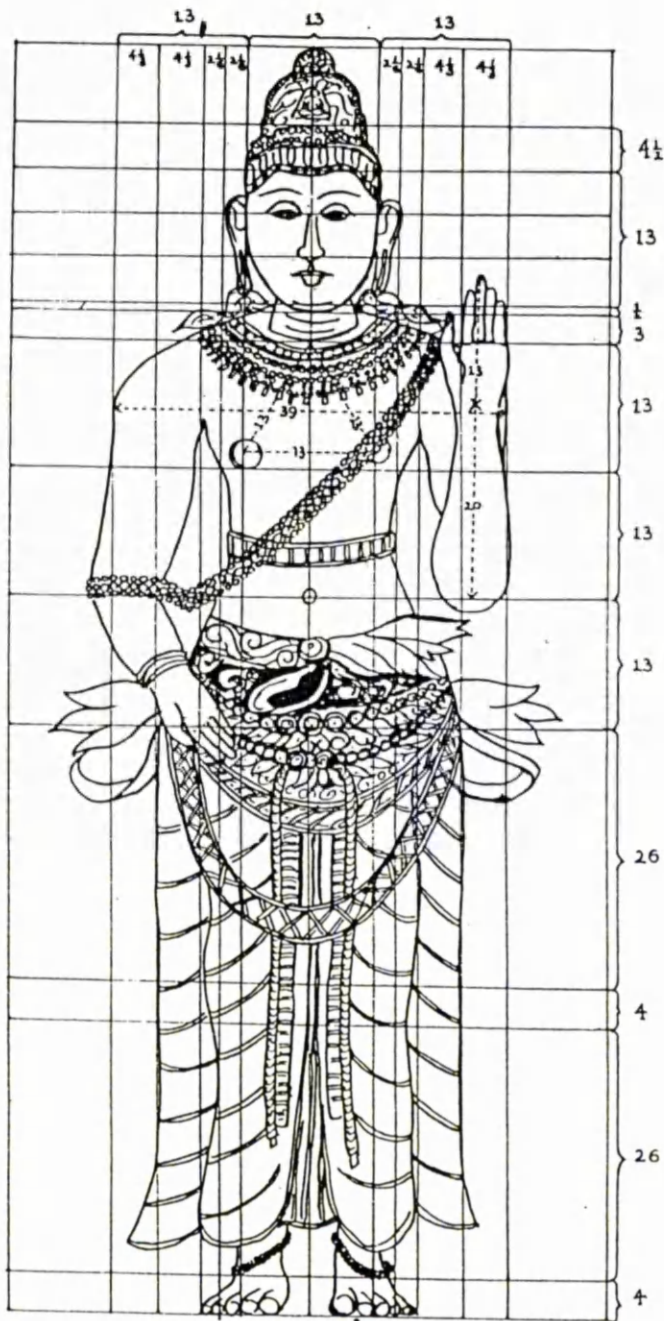


Figure 41 Representation of *madhyama-dasha-tala* drawn by Marasinghe according to the *Citrakarmashastra* (1991, Fig. 16)

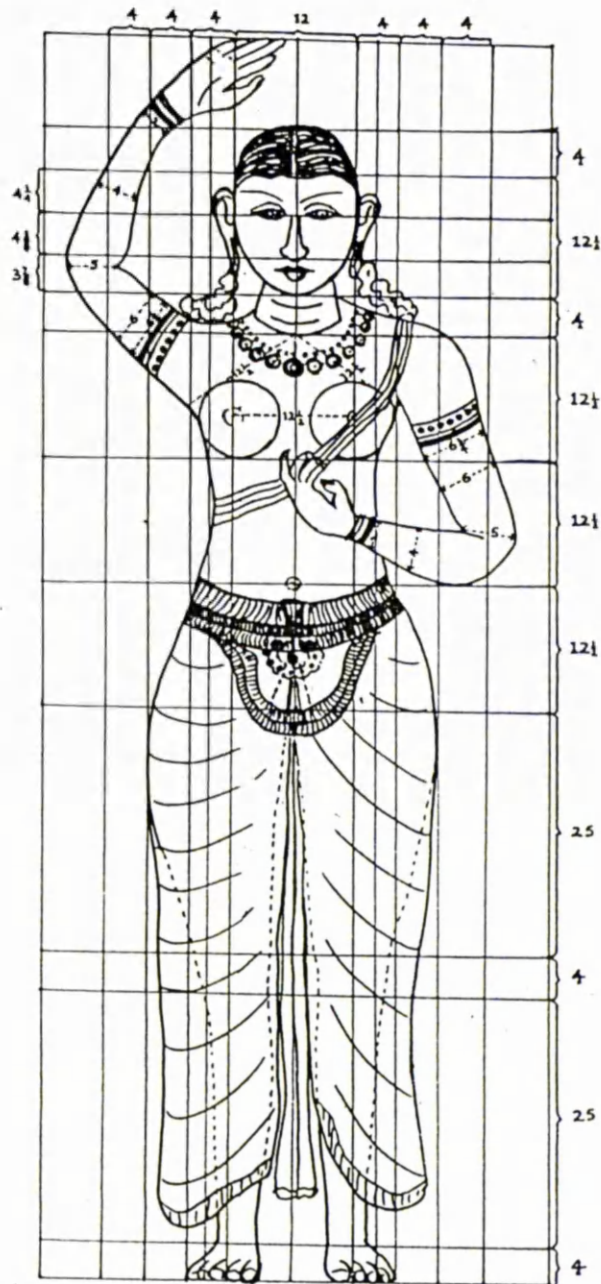


Figure 42 Representation of *adhama-dasha-tala* drawn by Marasinghe according to the *Citrakarmashastra* (1991, Fig. 17)

## PAŪCHA TALAN.

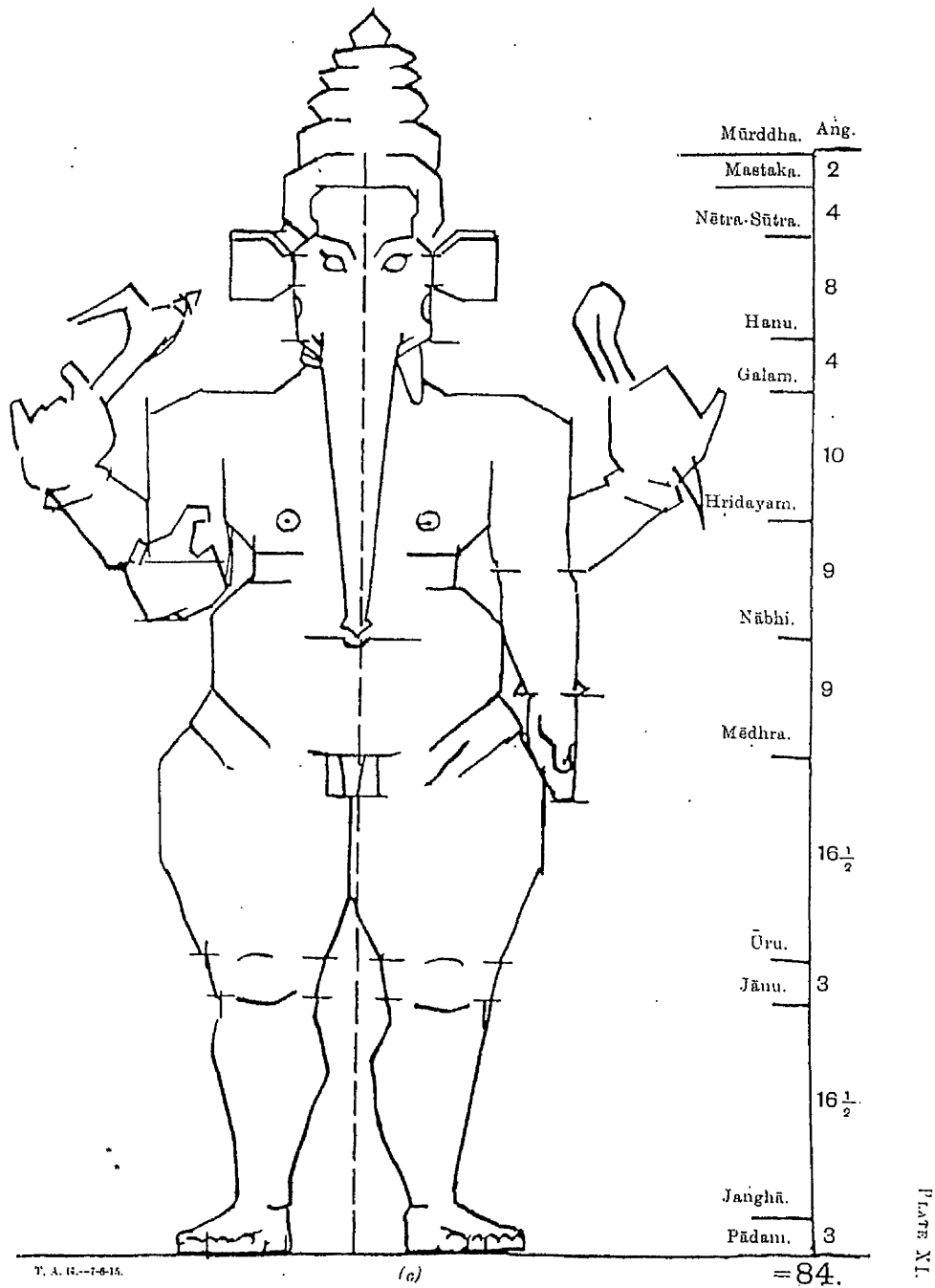
Figure 43 Representation of a *panca-tala* Ganesha according to Rao (1920, plate XI)





Figure 44 Representation of a *kinnara* in *madhyama-tri-tala* measurement (Rao 1920, plate XIII)

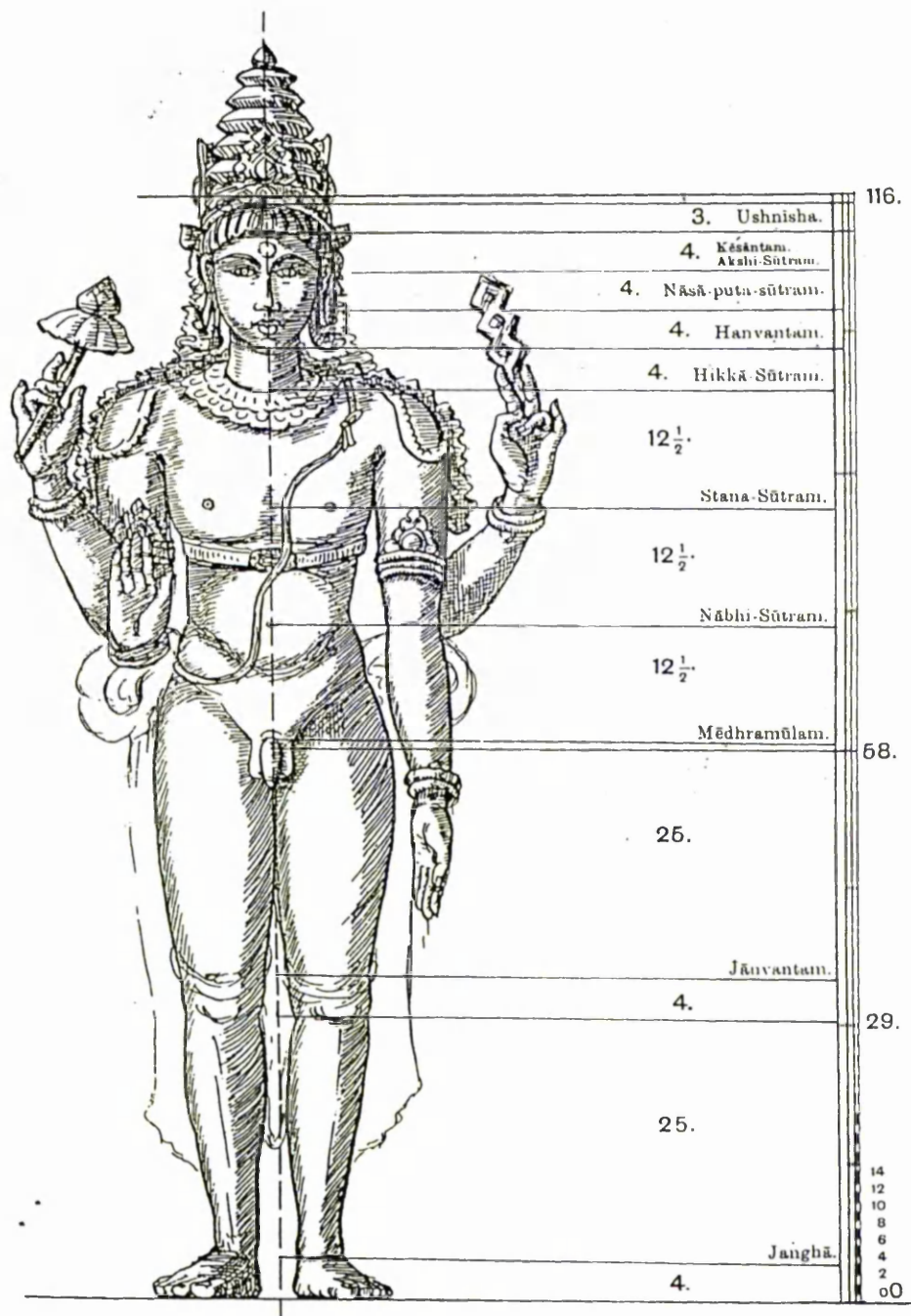


Figure 45 Representation of some horizontal lines according to Rao (1920, plate X)



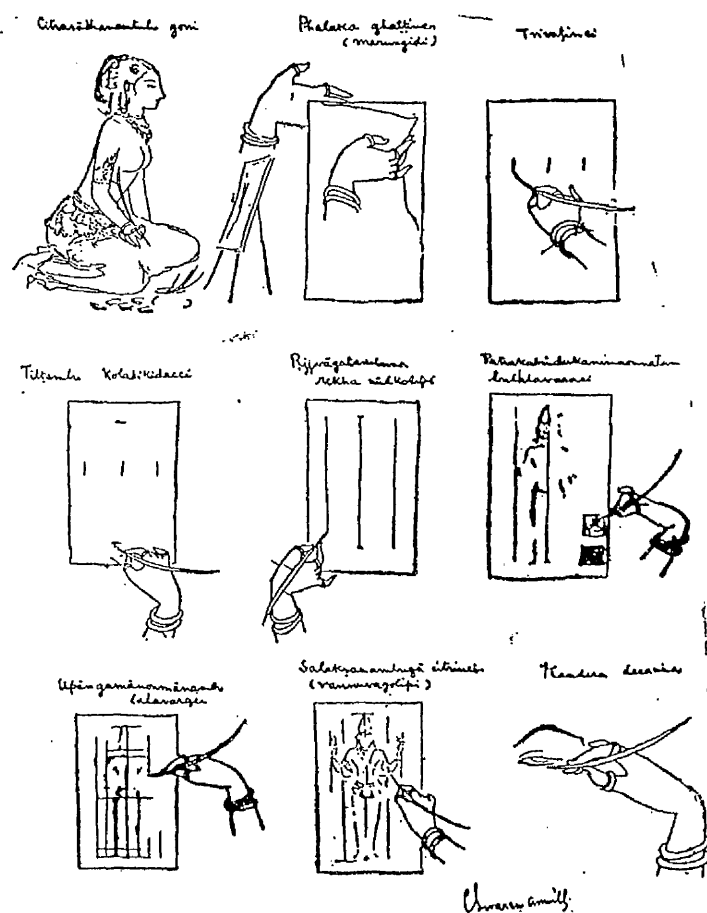


Fig. 174. Proces of Painting a Picture

Figure 47 Representation of the different stages in the realisation of a painting as described in the *Shilparatna*. Drawing by Sivaramamurti (Sivaramamurti 1979, p. 171)



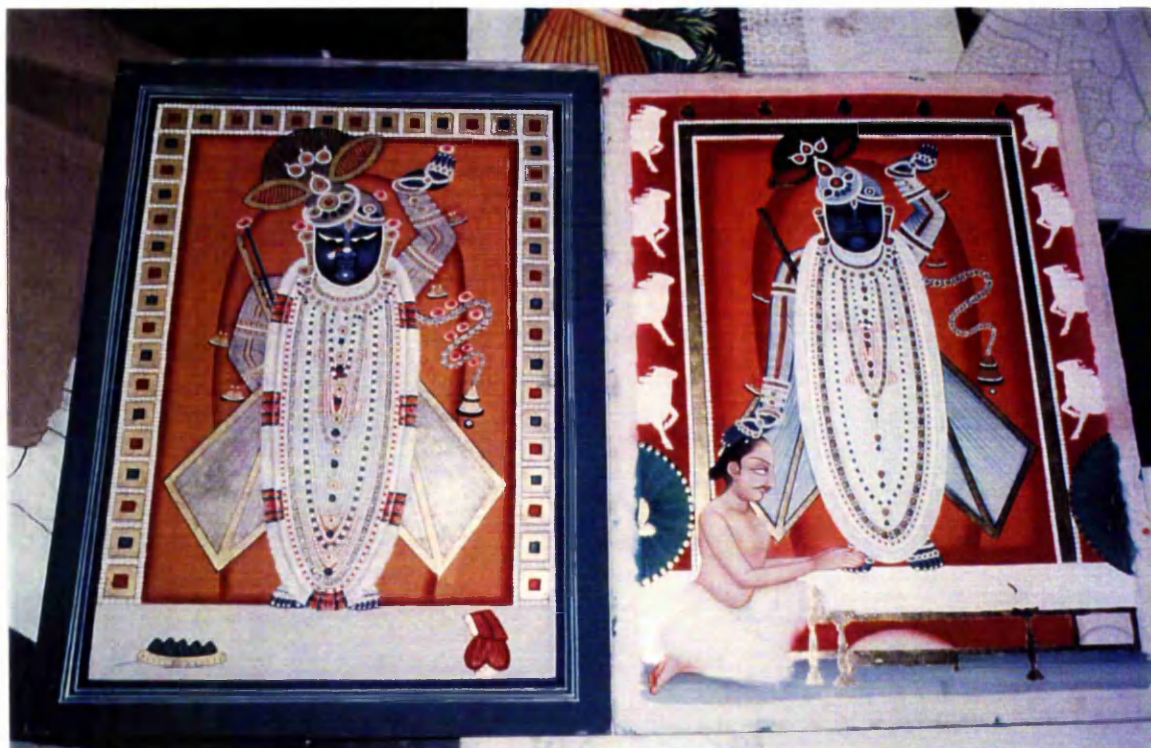


Figure 48 Two paintings representing the images of Shri Nath by Ramesh Chandr Jangid (Nathdvara)

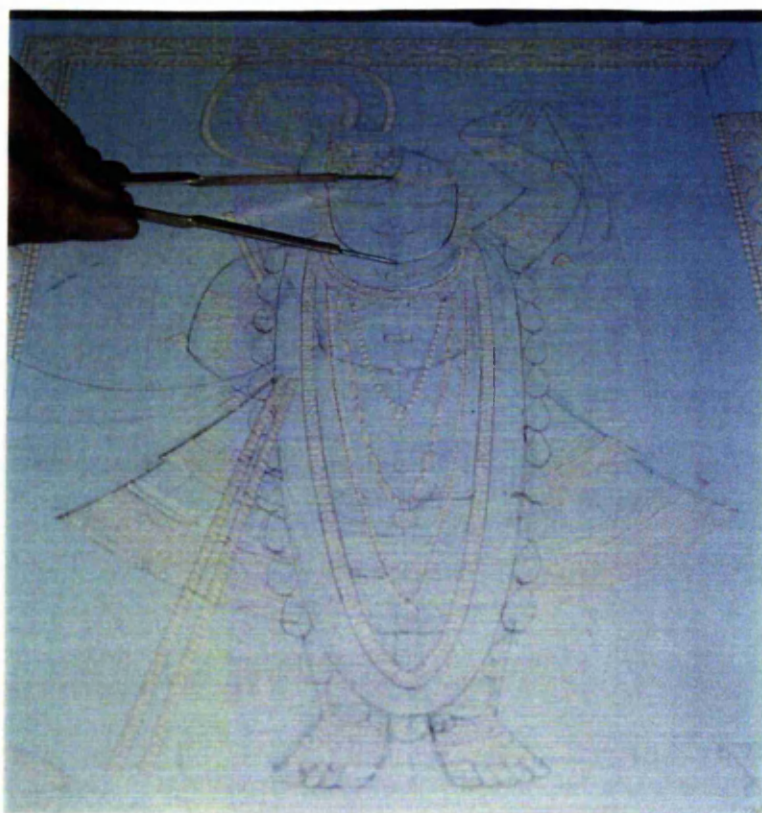


Figure 49 The painter Ghanshyam Sharma (Nathdvara) explains with the use of a compass the division in *talas* of his painting representing the image of Shri Nath



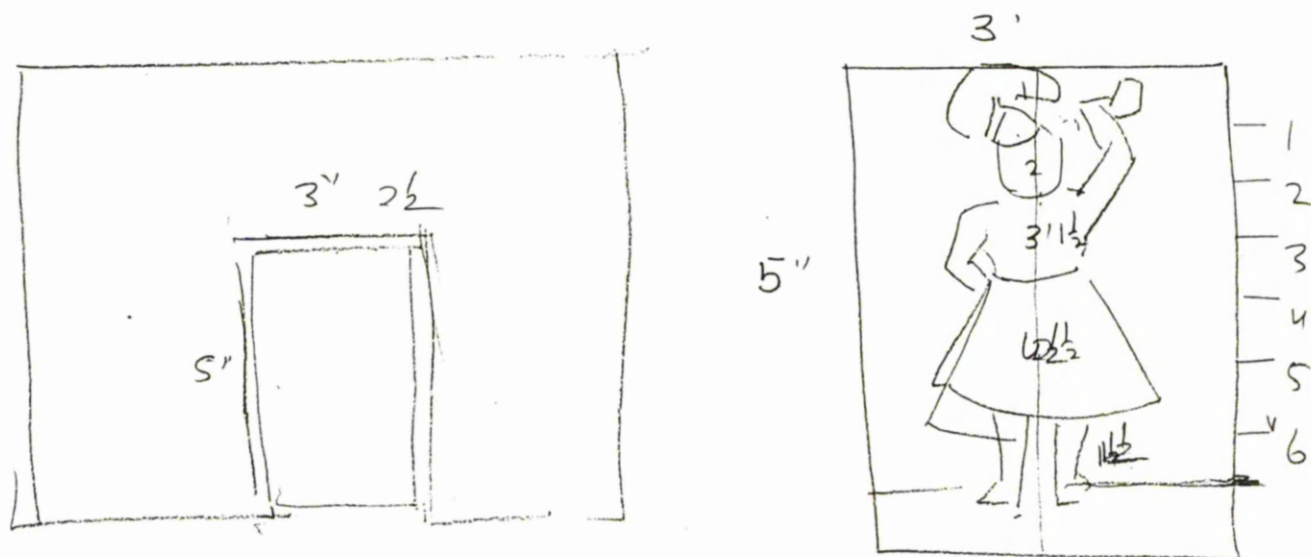


Figure 50 Sketch showing the measurement of Shri Nath and his stele drawn by Chiranjeev Lal (Nathdvara) according to the proportions of the image standing in the *haveli* temple of Nathdvara

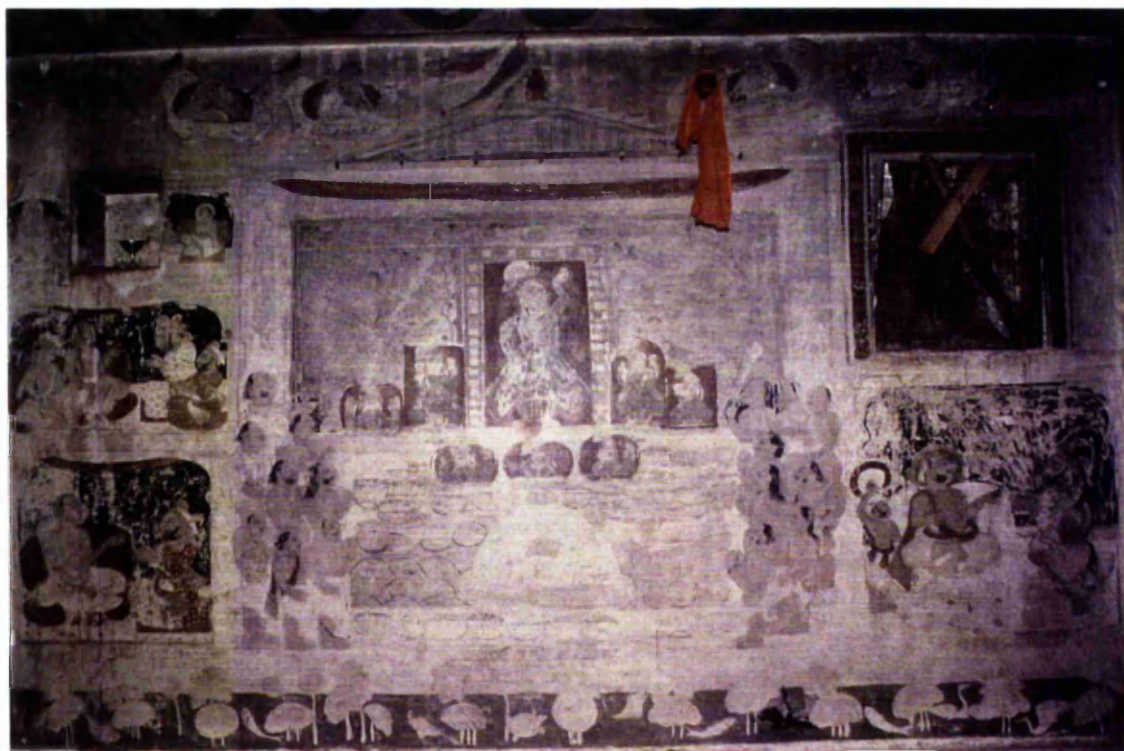


Figure 51 Fresco painting in the Mahuavala Akhara showing horizontal lines and a vertical line dividing into two parts the entire composition

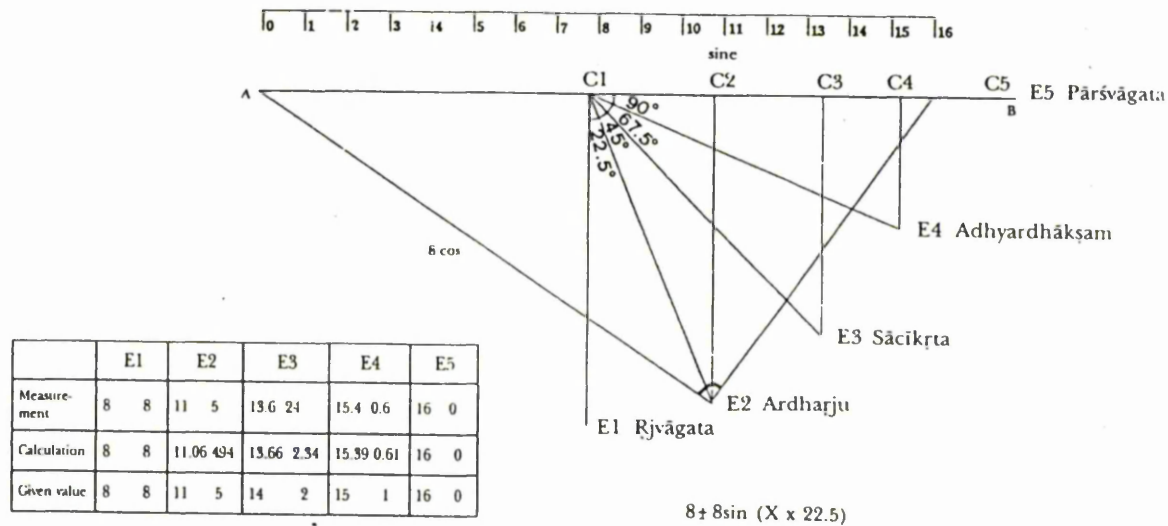


Figure 52 Sketch of a Tanjore painting on board showing horizontal and vertical lines

Figure 53 Pricked drawing representing Krishna as a child used by Kalamani Venkatesaraja for his Tanjore painting on board

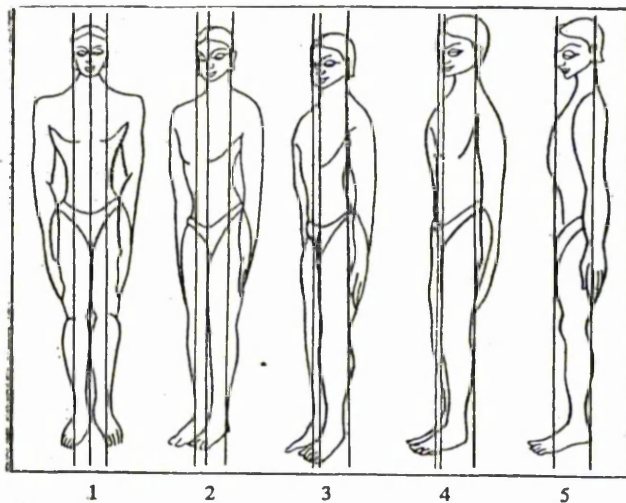






E : Viewing point  
 AB : Distance between the nipples  
 C : Centre  
 AB : Stationary ; E Shifts

Figure 54 Representation of the stances of the *Vishnudharmottara* and *kshayavṛddhī* according to Dave Mukherji (2001, diagram I)



#### FIVE FRONTAL STANCES

1. Rju ( 6 : 6 ) 2. Ardha-rju ( 4 : 8 ) 3. Sācī ( 2 : 10 )
4. Dvyardhākṣi ( 1 : 11 ) 5. Bhittika ( 0 : 6 )

Figure 55 Representation of frontal stances described in the *Shilparatna* according to Bhattacharya (1974, p. 49)



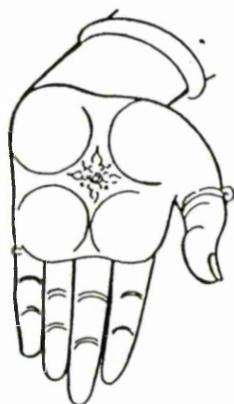
TARJANEE HASTA

Figure 56 Representation of *tarjani hasta mudra* (Ganapati Sthapati 2002, p. 87)



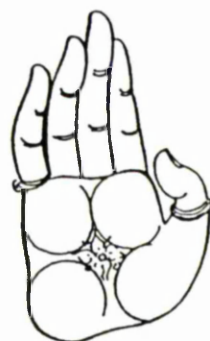
SUCHI HASTA

Figure 57 Representation of *suci hasta mudra* (Ganapati Sthapati 2002, p. 86)



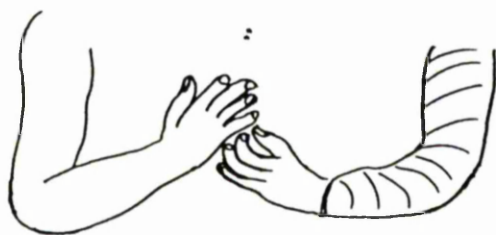
VARADA HASTA

Figure 58 Representation of *varada hasta mudra* (Sthapati 2002, p.84)



ABHAYA HASTA

Figure 59 Representation of *abhaya hasta mudra* (Sthapati 2002, p. 86)



Dharmacakra

Figure 60 Representation of *dharmacakra mudra* (Marasinghe 1991, Fig. 30)



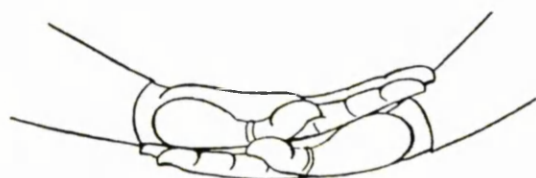
Bhūsparśa

Figure 61 Representation of *bhumisparsha mudra* (Marasinghe 1991, Fig. 30)



Fig. 17

Figure 62 Representation of *yoga mudra* according to Rao (1914, Fig.17)



DHYANA HASTA

Figure 63 Representation of *dhyana hasta* according to Sthapati (2002, p. 91)

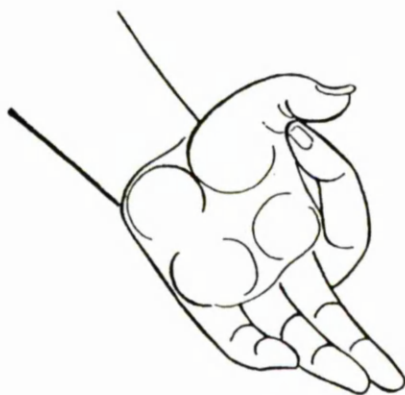


Dhyāna

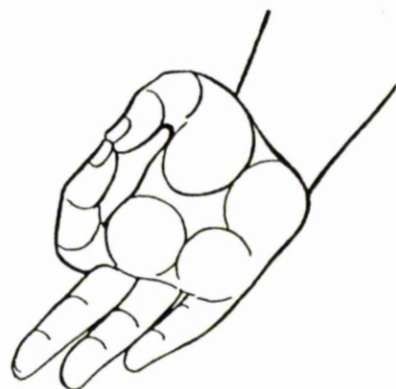
Figure 64 Representation of *dhyana hasta* according to Marasinghe (1991, Fig. 30)



VYAKHYANA HASTA



VYAKHYANA HASTA (a)

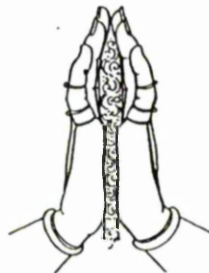


VYAKHYANA HASTA (b)

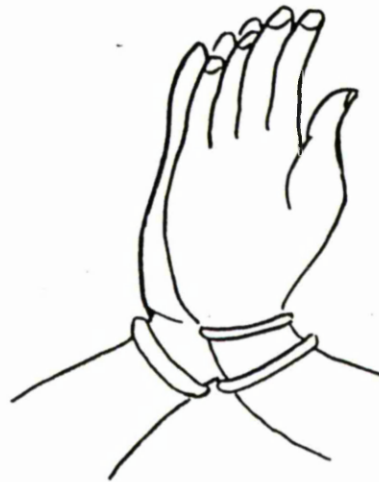
Figure 65 Representations of *vyakhyana hasta mudra* according to Sthapati (2002, p. 86)



Fig. 16

Figure 66 Representation of *jnana mudra* according to Rao (1914, Fig. 16)

ANJALI HASTA



Añjali

Figure 67 Representations of *anjali hasta mudra* according to Marasinghe (1991, Fig. 29) and Sthapati (2002, p. 91)

KATAKA HASTA



KATAKA HASTA

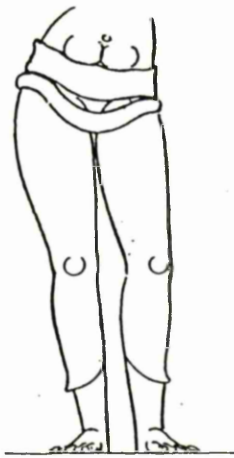
Figure 68 Representations of *kataka hasta mudra* according to Sthapati (2002, p. 85)

SIMHA KARNA HASTA



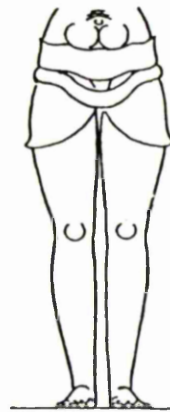
SIMHA KARNA HASTA

Figure 69 Representations of *simha karna hasta mudra* according to Sthapati (2002, p. 85)



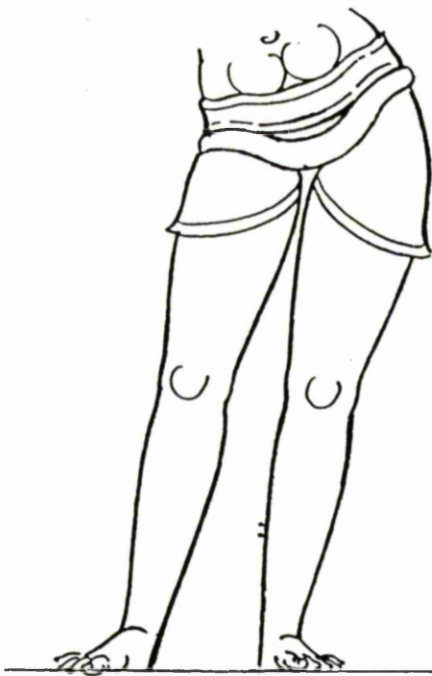
VAISHNAVAM

Figure 70 Representation of *vaishnava pada mudra* (Sthapati 2002, p. 64)



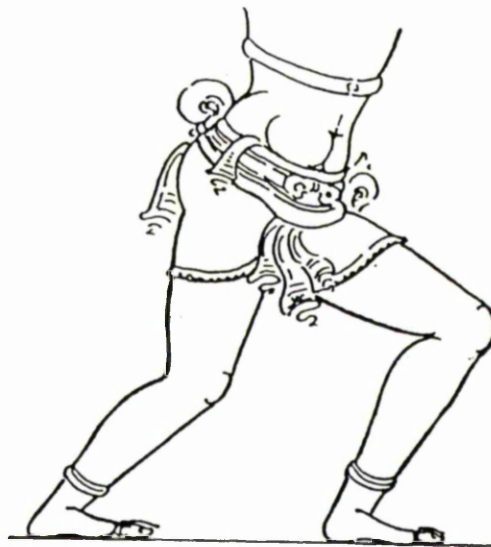
SAMAPADA STHANAKAM

Figure 71 Representation of *samapada pada mudra* (Sthapati 2002, p. 60)



VAISAKHA STHANAKAM

Figure 72 Representation of *vaishakha pada mudra* (Sthapati 2002, p. 64)



ALIDASANAM

Figure 73 Representation of *alidha pada mudra* (Sthapati 2002, p. 65)

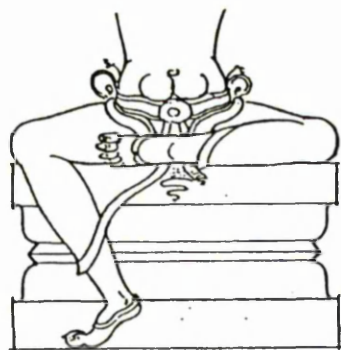




प्रत्यालीढम् ( प्रत्यालीढपदम् )  
 पूर्णिया ( बिहार ) मण्डले लब्धा  
 यन्त्रविदारिता मुद्रा

Figure 74 Representation of *pratyaliḍha* posture after the *Vishnudharmottara* by Sastri (1971)





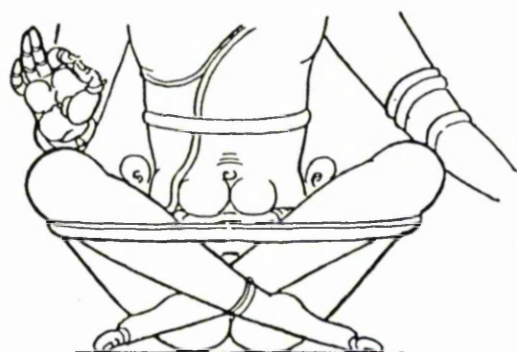
SUKHASANAM

Figure 75 Representation of *sukhasana* according to Sthapati (2002, p. 61)



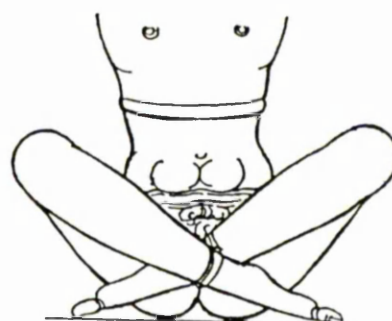
Fig. 38:  
Sukhāsana

Figure 76 Representation of *sukhasana* according to Boner (1982, p. 108)



YOGASANAM

Figure 77 Representation of *yogasana* (Sthapati 2002, p. 63)



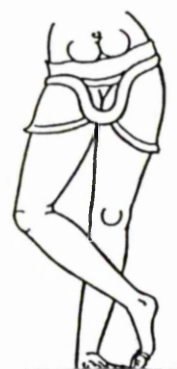
SWASTIKASANAM

Figure 78 Representation of *svastikasana* (Sthapati 2002, p. 63)



Fig. 40:  
Svastikāsana

Figure 79 Representation of *svastikasana* according to Boner (1982, p. 109)



SWASTIKASANAM

Figure 80 Representation of *svastikasana* as a standing pose (Sthapati 2002, p. 64)



Fig. 42:  
Kukkūṭāsana

Figure 81 Representation of *kukkutasana* (Boner 1982, p. 109)



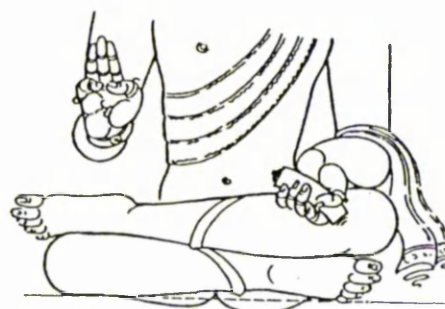
Fig. 39:  
Viṣamāsana

Figure 82 Representation of *vishamasana* (Boner 1982, p. 108)



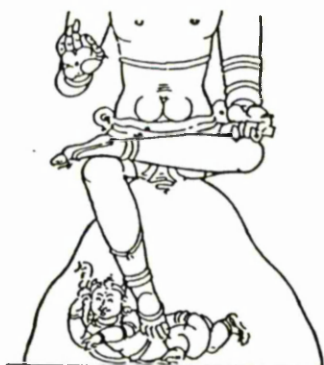
Fig. 43:  
Saumyāsana

Figure 83 Representation of *saumyasana* (Boner 1982, p. 109)



RAJA LINGASANAM

Figure 84 Representation of *raja lingasana* (Sthapati 2002, p. 62)



VIRASANAM

Figure 85 Representation of *virasana* (Sthapati 2002, p. 62)





Figure 86 Fresco painting representing Devnarayan and his court (19<sup>th</sup> century) (Sanvar, Udaipur District)



Figure 87 Mahavira on Mount Meru from a *Kalpasutra* Manuscript (Mandu, c. 1440) (Welch 1997, p. 71)

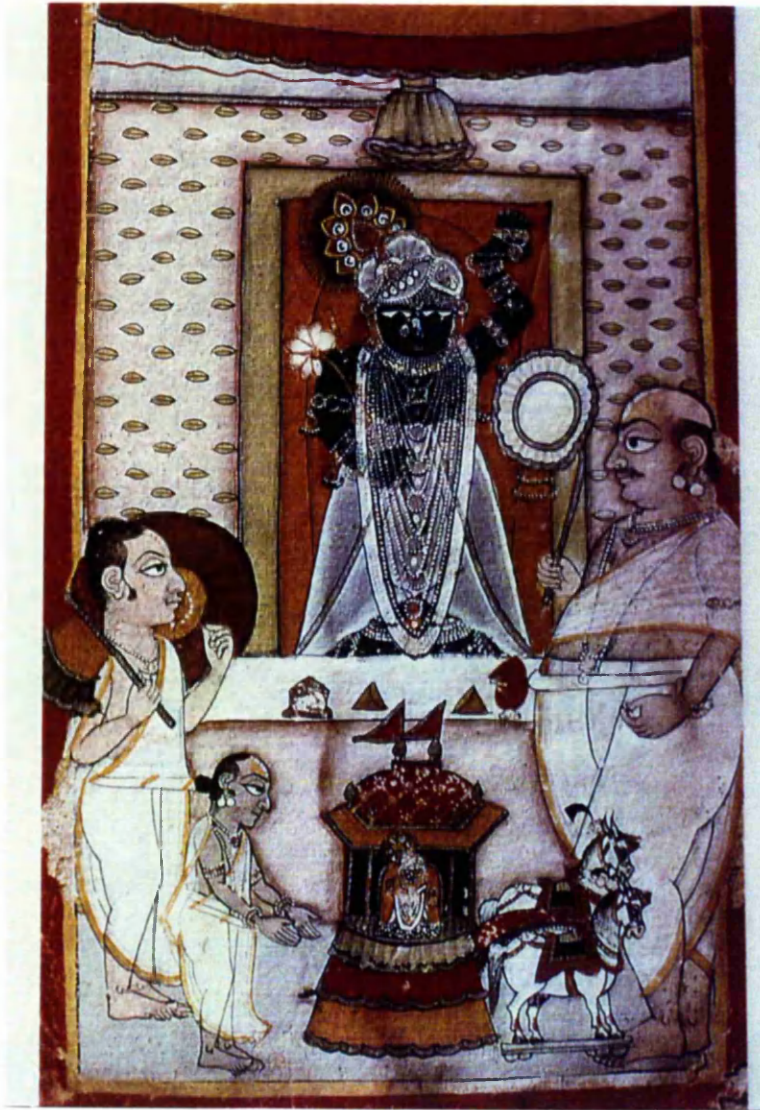


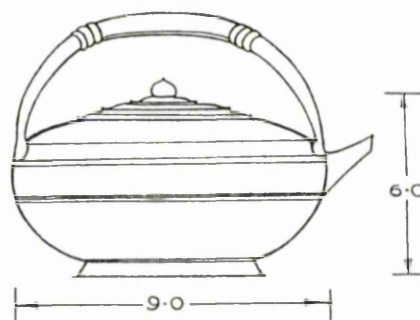
Figure 88 Representation of Shri Nath ji celebrating *rathayatra* (Nathdvara, mid 18<sup>th</sup> century) (Ambalal 1987, p. 36)





Figure 89 *Brahma Riding a Goose* (Mankot, c. 1720) (Filippi 1997, p. 48)

Figure 90 *Kamandalu* (Sthapati 2002, p. 187)

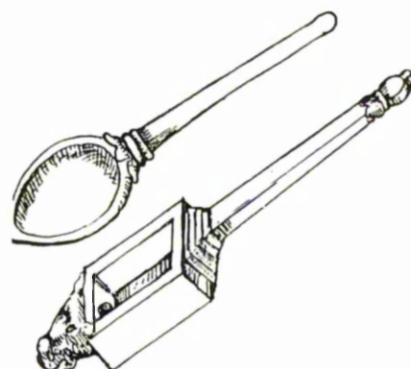


KAMANDALU



Fig. 34:  
Māla

Figure 91 *Aksha-sutra* (Boner 1982, p. 106)

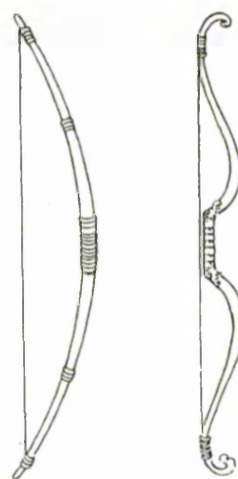


SIRUK - SURUVAM

Figure 92 *Sruc and sruva* (Sthapati 2002, p. 191)

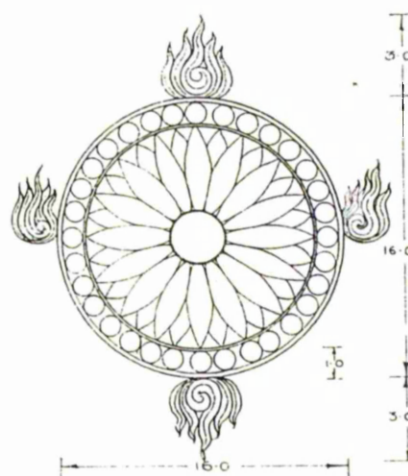


Figure 93 Mural painting in Shranganatha temple at Shranganam (14<sup>th</sup>-17<sup>th</sup> century) representing Vishnu resting on Ananta-Shesha



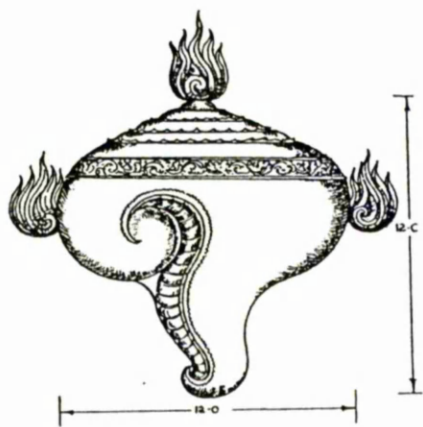
VIL or BOW

Figure 94 Bow (Sthapati 2002, p. 185)

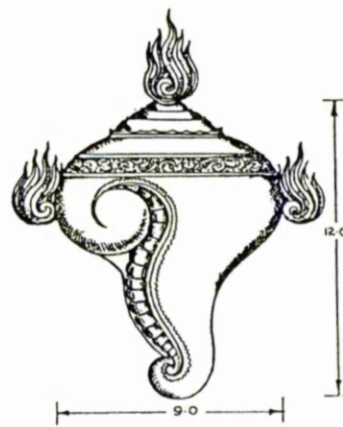


CHAKRAM

Figure 95 Discus (Sthapati 2002, p. 186)

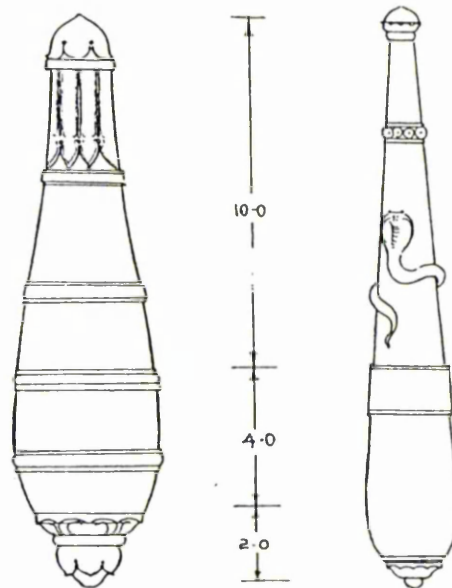
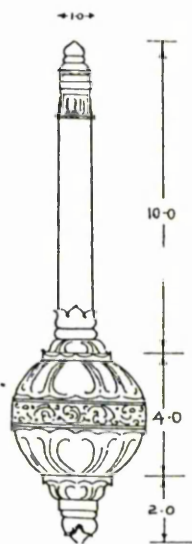


CHANGU (a)



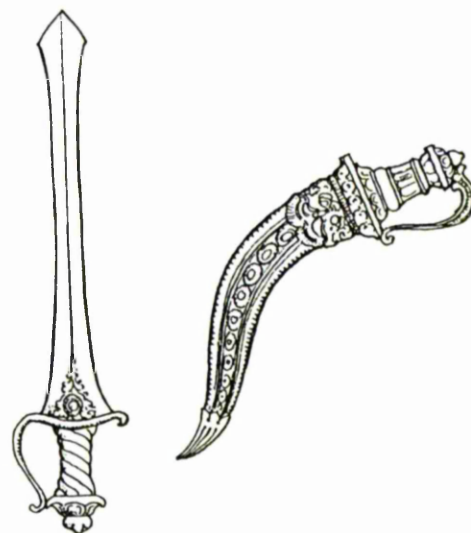
CHANGU (b)

Figure 96 Conch (Sthapati 2002, p. 187)



GADAI OR MACE

Figure 97 Mace (Sthapati 2002, p. 185)



KADGAM OR UDAIVALL

Figure 98 Sword (Sthapati 2002, p. 190)





Figure 99 Mural painting representing the image of Ganesha in the Brhadishvara temple (11<sup>th</sup> century) in Tanjore (Tamil Nadu)

Figure 100 *Ankusha* or elephant hook (Sthapati 2002, p. 184)

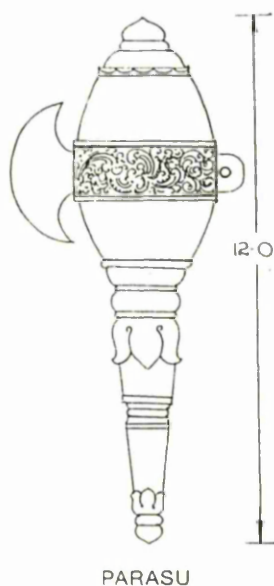
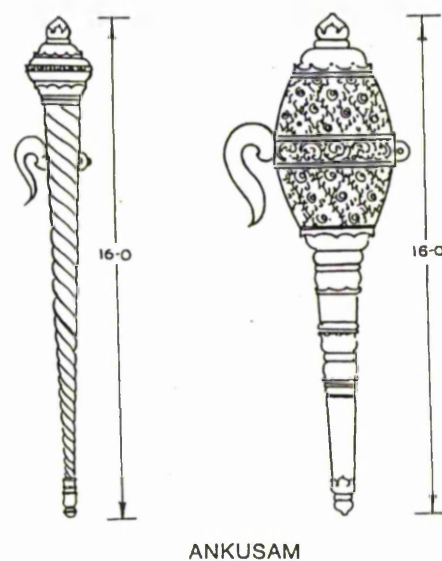


Figure 101 *Parashu* or axe (Sthapati 2002, p.186)



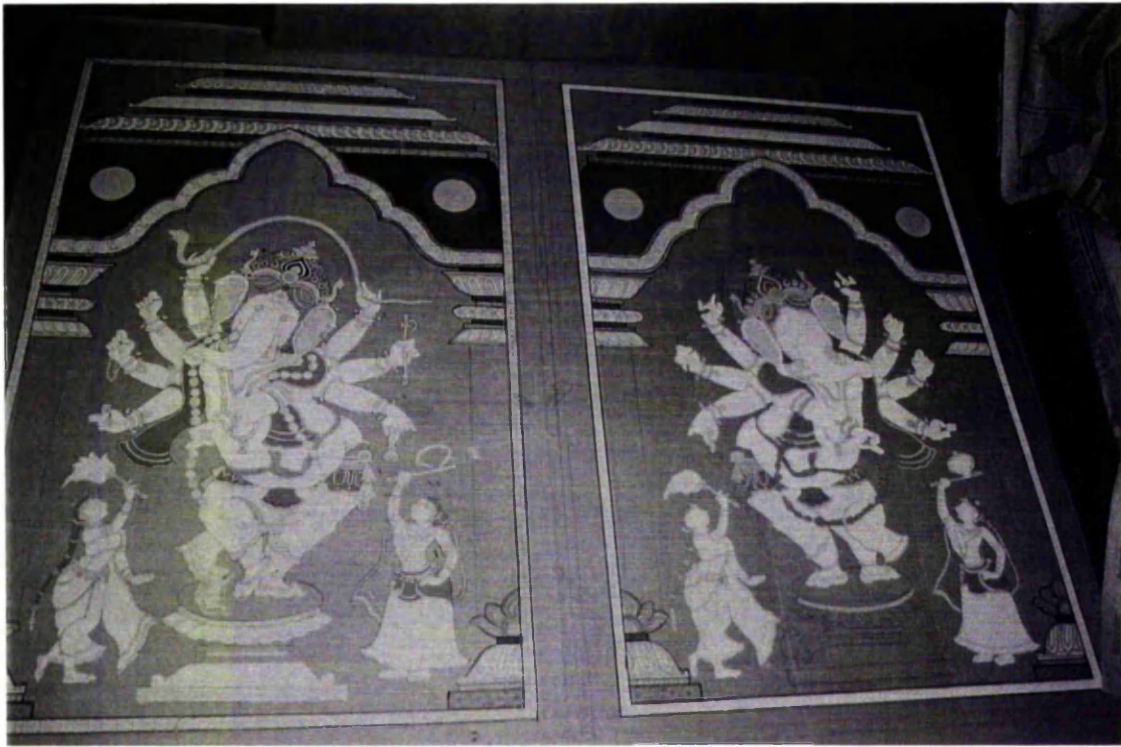
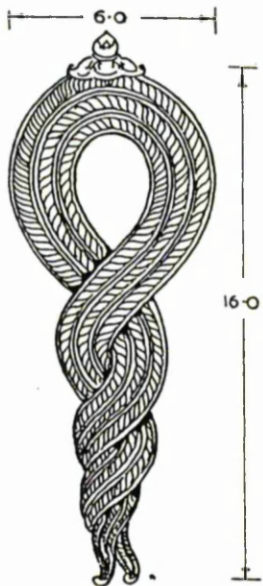


Figure 102 Ganesha as Heramba. Incompleted Orissan painting (Raghurajpur).



PASAM



Fig. 29:  
Pāśa

Figure 103 *Pasha* or noose (Sthapati 2002, p. 184 and Boner 1982, p. 106)

Figure 104 Lakshmi. Tanjore painting by the master craftsman T. Venkatesaraja (Tanjore, Tamil Nadu)



Figure 105 Lakshmi. Orissan painting (Mohanti 1984, Fig. 15)



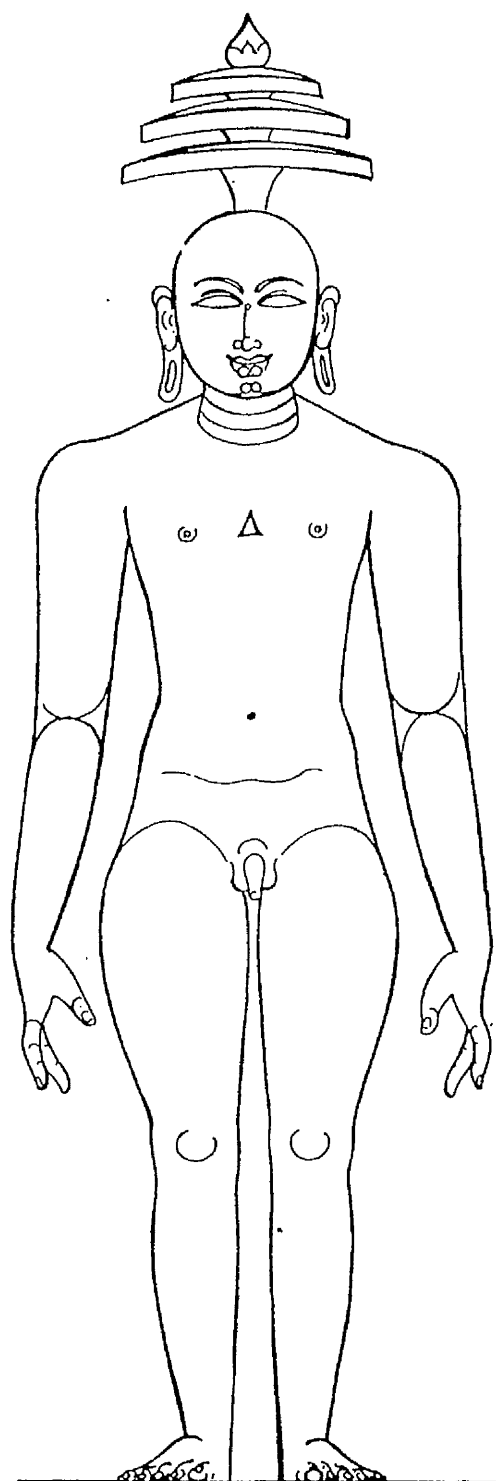


IMAGE OF A JAIN TIRTHANKARA

Figure 106 Jain *tirthankara* (Sthapati 2002, p. 328)





Figure 107 Ganesha holding axe and mace in the upper hands, and *abhaya* and *laddus* in the lower hands. Sculpture by Ram Prasad Sharma (Jaipur)



Figure 108 Ganesha holding lotus and *ankusha* in the upper hands, and *abhaya* and *laddus* in the lower hands. Sculpture by Ram Prasad Sharma (Jaipur)



Figure 109 Ganesha holding axe and *ankusha* in the upper hands, and *abhaya* and *laddus* in the lower hands. Sculpture by Ram Prasad Sharma (Jaipur)





29. *Panchamukhi* (five-headed *Ganesh*).

Figure 110 Ganesha as Pancamukhi with five heads and ten arms (Mohanti 1984, Fig. 29)



Figure 111 Standing Ganesha holding a broken tusk and *laddus* in his upper arms, and *aksha-mala* and axe in his lower hands. Sculpture by Harihar Moharana (Bhubaneshtar)





Fig. 3. Threefold *vartanā*, *binduja* stippling, *patra* cross-hatching, *raikhika* fine lineation.



3

Figure 112 Line rendering according to the *Vishnudharmottara* (Sivaramamurti 1978, p. 5 and Bhattacharya 1976, Fig. 3)



Figure 113 *Krishna Battles the Armies of the Demon Naraka*. Page from a dispersed *Bhagavata Purana* (Delhi-Agra, c. 1520-30) (Kossak 1997, Fig. 4)

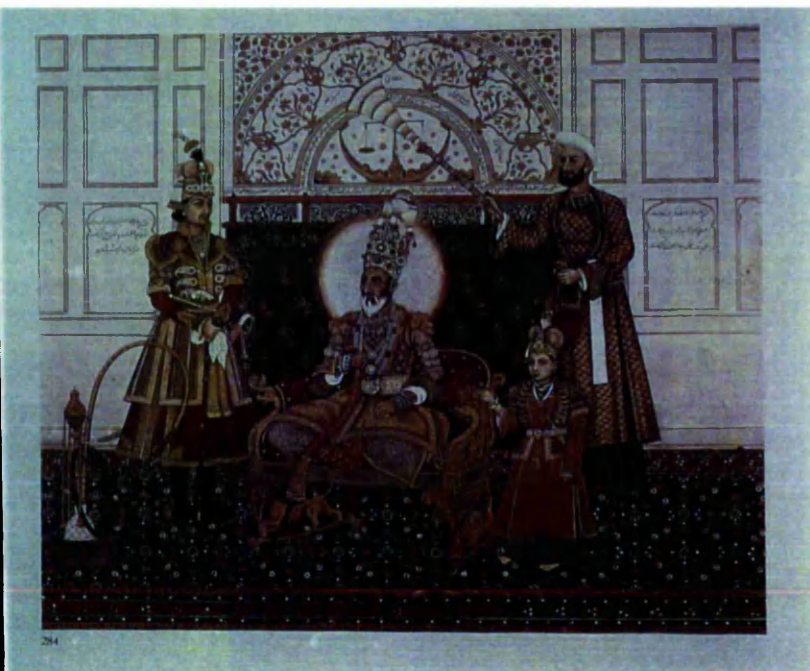


Figure 114 *Emperor Bahadur Shah II Enthroned* (Mughal, Delhi, c. 1838) (Welch 1985, Fig. 284)



49. *Hindola Rāga* (*Rādhā and Krishna Seated on a Swing*).  
*Punjab Hills, Mandi, circa 1640-45*



Figure 115 *Hindola Raga* (Mandi, c. 1640-45) (Purington and Newman 1985, Fig. 49)



39. *A Festive Procession.*  
Rajasthan, Jaipur, 1833



Figure 116 *A Festive Procession* (Jaipur, 1933) (Purinton and Newman 1985, Fig. 39)





Figure 117 Unidentified *jataka* story, Cave 1, Ajanta (c. 462-500) (Dehejia 1997, Fig. 88)



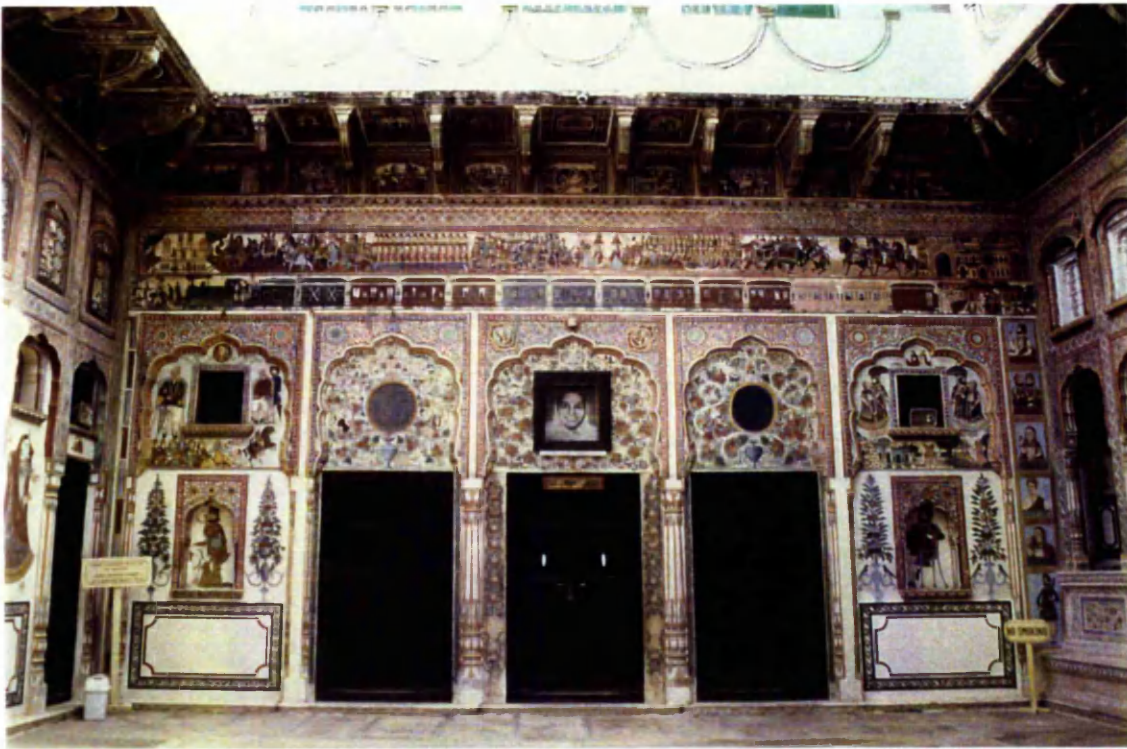


Figure 118 Examples of fresco painting at Anandi Lal Poddar Haveli, Navalgarh c. 1920 (Shekhavati Region, Rajasthan)



Figure 119 Kala ji and Gora ji. Fresco *buono* from the Devnarayan temple of Sanvar (19<sup>th</sup> century, Udaipur District Rajasthan)





Figure 120 Traditional fresco *buono* by Kripal Singh (Rajputana Palace Sheraton, Jaipur 1994)



Figure 121 Tools used in traditional mural painting



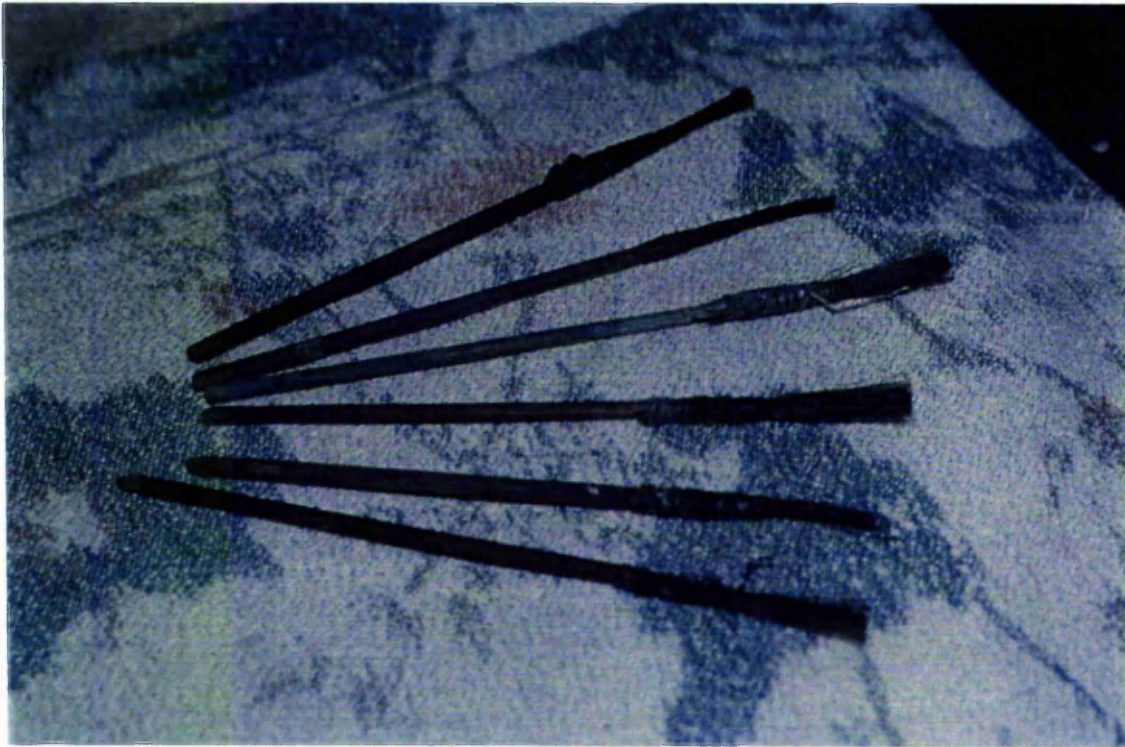


Figure 122 Hand made brushes prepared by a *phar* painter in Chittorgarh



Figure 123 Detail of a *phar* painting illustrating the story of Devnarayan by the painter Ram Gopal Joshi (Chittorgarh)





Figure 124 Agate stone used for the preparation of wall or cloth for painting



Figure 125 The traditional painter Gopal Joshi showing the yellow outline of his *phar* painting





Figure 126 Mortar for the preparation of gum of tamarind seeds and chalk used in traditional Orissan painting (Raghurajpur)



Figure 127 Young painter employing artificial colours and cardboard (Nathdvara)



Figure 128 Traditional natural colours prepared by the painter Lalit Sharma (Udaipur)





Figure 129 *Reunion on a Moonlit Night*, from a *Bhagavata Purana* series, Pahari, 3<sup>rd</sup> or last quarter of the 18<sup>th</sup> century, from the family workshop of Seu-Nainsukh (Goswamy 1986, p. 85)



Figure 130 *When Krishna Disappears*, from a *Bhagavata Purana* series, Pahari, 3<sup>rd</sup> or last quarter of the 18<sup>th</sup> century, from the family workshop of Seu-Nainsukh (Goswamy 1986, p. 132)





Figure 131 Digambara Jaina image of Gomateshvara at Shravanabelagola (Western Gangas, 10<sup>th</sup> century)

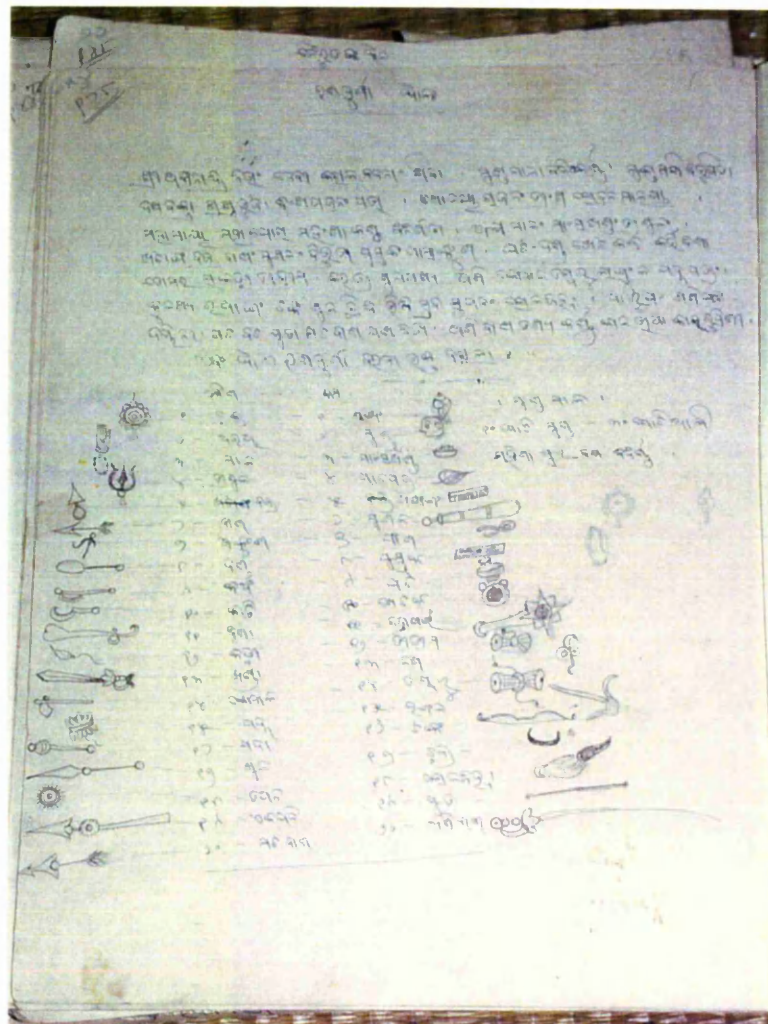


Figure 132 Representation of weapons from a modern *citrasutra* (Raghurajpur, Orissa)



Figure 133 Representation of Mahishasuramardini from a modern *citrasutra* (Raghurajpur, Orissa)





Figure 134 Vishnu Trivikrama in the Harihara temple I, Osian (Pratihara, c. 8<sup>th</sup> century)  
(Kramrish 1976, vol. II, fig. lxx)